TRAFFIC IMPACT STUDY FOR

DRI #3506
SANSONE SPECULATIVE INDUSTRIAL DEVELOPMENT

DATE:
March 15, 2022

LOCATION:
Locust Grove, Henry County, Georgia

PREPARED FOR:
Sansone Group
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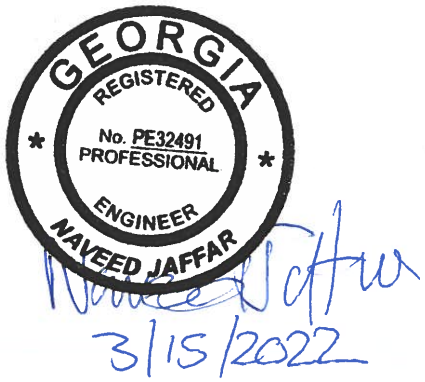

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Executive Summary

A new 882,200 square foot (sf) industrial development is proposed for construction west of State Route 42/US Highway 23 (SR 42) at Pine Grove Road, in Henry County, Georgia. The development will contain one (1) new full-access driveway along SR 42. The proposed driveway connection to SR 42 is planned to be aligned with the existing Pine Grove Road leg of the intersection.

The development is expected to be built-out by 2023 and will generate a total of 1,432 new daily trips. Of these daily volumes, 129 new trips (99 entering and 30 exiting) are expected to occur during the AM peak hour and 132 new trips (37 entering and 95 exiting) are expected to occur during the PM peak hour.

Existing intersections adjacent to the planned development were evaluated to determine if new roadway geometries or traffic controls will be needed once the new development is built. The following intersections evaluated in this study are:

1. SR 42 at Bethlehem Road / Michaels Drive
2. SR 42 at Pine Grove Road / Site Driveway
3. SR 42 at Market Place Boulevard
4. SR 42 at Bill Gardner Parkway
5. Bill Gardner Parkway at Market Place Boulevard

At build-out, one (1) traffic signal control installation is programmed to replace the existing unsignalized traffic controls at SR 42 and Market Place Boulevard. Ten (10) additional roadway improvement projects are programmed and planned for future years after the 2023 build-out year by City of Locust Grove, Henry County, and GDOT authorities. However, only the traffic signal control installation at SR 42 and Market Place Boulevard was evaluated in future conditions since it is the only programmed project that will be installed by the build-out year.

Existing and No-Build Conditions evaluated peak hour traffic volumes with existing traffic controls and lane geometries. Build Conditions evaluated peak hour traffic volumes with existing traffic controls and lane geometries, with optimized timing splits from the Existing and No-Build cycle lengths.

Optimized signal timing plans should be considered at all signalized intersections in future years to accommodate future traffic volumes.

Table A summarizes the changes observed in intersections with undesirable LOS approaches between No-Build and Build Conditions during AM and PM peak hours. The table also compares a relationship between the percent of site traffic associated with future movements and approaches with LOS E or F in Build Conditions, and the capacity analysis results of Build Mitigation Conditions. The only improvements made between No-Build and Build Conditions are optimized cycle length splits at signalized intersections, in addition to minimum turn lane improvements needed at the site driveway intersections.

The evaluated parameters for Build Mitigation Conditions are identified on the following pages of the Executive Summary as the Recommended Conditions of Approval and Recommended Advisory Condition improvements for DRI # 3506, in addition to being identified in Report Section D: Traffic Impact Analysis.

Table B summarizes where the left turn or right turn storage lengths and taper lengths are exceeded by either existing or future traffic volumes where there is LOS E or F presence.

The general conditions and roadway improvement conditions that are recommended for this DRI are on the pages following the Table B results.

Table A: Capacity Analysis Result Summary –No-Build, Build, and Build Mitigation Condition Relationships

ID	Intersection	Existing Control	Movement	AM									PM								
				No-Build		Build		Site Traffic	Total Traffic	% of Total Traffic	Build Mitigation		No-Build		Build		Site Traffic	Total Traffic	% of Total Traffic	Build Mitigation	
				LOS	Delay	LOS	Delay				LOS	Delay	LOS	Delay	LOS	Delay				LOS	Delay
1	SR 42 & Bethlehem Rd / Michaels Dr	Stop-Control	**Overall**	F	**54.7**	F	**60.6**	26	1539	2%	**A**	**9.5**	**D**	**34.5**	**E**	**39.1**	26	1771	1%	**A**	**8.0**
			EB	F	493.6	F	528.1	9	174	5%	C	21.7	F	356.6	F	405.4	2	169	1%	B	18.6
			WB	D	30.4	D	31.9	0	14	0%	B	18.3	D	26.7	D	28.3	0	4	0%	B	15.7
			NBL	A	9.9	B	10.0	6	655	1%	A	9.7	A	9.6	A	9.6	19	688	3%	A	7.7
			SBL	A	8.9	A	8.9	11	696	2%	A	6.1	B	10.9	B	11.0	5	910	1%	A	6.2
2	SR 42 & Pine Grove Rd / Site Driveway	Stop-Control	**Overall**	**A**	**0.6**	**A**	**2.0**	129	1416	9%	**A**	**2.0**	**A**	**0.5**	**A**	**2.8**	132	1628	8%	**A**	**2.8**
			EB	N/A	N/A	F	63.9	30	30	100%	F	63.9	N/A	N/A	F	76.7	95	95	100%	F	76.7
			WB	E	43.7	F	69.4	4	17	24%	F	69.4	D	26.6	E	38.7	2	32	6%	E	38.7
			NBL	N/A	N/A	A	9.2	75	783	10%	A	9.2	N/A	N/A	A	9.9	28	660	4%	A	9.9
			SBL	A	9.7	A	9.7	20	586	3%	A	9.7	A	8.9	A	8.9	7	841	1%	A	8.9
4	SR 42 & Bill Gardner Pkwy	Signal	**Overall**	**E**	**57.9**	**E**	**68.5**	44	2292	2%	**C**	**29.5**	**F**	**89.2**	**F**	**109.2**	42	2446	2%	**C**	**34.6**
			EB	E	71.1	F	161.5	6	715	1%	D	43.6	F	137.7	F	204.9	4	1068	0%	D	38.3
			NB	E	57.0	C	25.9	28	1273	2%	C	22.5	E	58.0	C	34.4	7	851	1%	C	29.9
			SB	C	29.8	C	28.3	10	304	3%	C	25.4	D	38.3	D	39.3	31	527	6%	C	34.8
5	Bill Gardner Pkwy & Market Place Blvd	Signal	**Overall**	**D**	**42.4**	**D**	**47.0**	63	2891	2%	**C**	**24.6**	**F**	**148.1**	**F**	**156.1**	68	4369	2%	**F**	**83.1**
			EB	C	20.5	C	20.5	47	945	5%	B	15.1	F	106.1	F	106.8	21	1757	1%	E	75.3
			WB	D	43.0	D	42.8	3	1074	0%	C	25.2	F	168.6	F	168.5	6	1446	0%	E	77.4
			NB	D	52.2	D	51.9	0	451	0%	C	34.4	F	197.6	F	197.6	0	643	0%	F	100.6
			SB	E	78.3	F	112.0	13	421	3%	C	34.0	F	169.4	F	233.4	41	523	8%	F	103.5

Table B: Left Turn/Right Turn Storage Length Queue Summary

ID	Intersection	Turn Lane / Movement Approach	50th (95th) Percentile Queues, in feet							
			Lengths, in feet		Existing		No-Build		Build	
			Storage	Taper	AM	PM	AM	PM	AM	PM
1	SR 42 & Bethlehem Rd/Michaels Dr	EBLTR	N/A	N/A	86 (129)	112 (175)	76 (142)	50 (90)	73 (134)	156 (262)
		WBLTR	N/A	N/A	23 (57)	0 (0)	8 (36)	0 (0)	0 (0)	4 (19)
		NBL	N/A	N/A	45 (93)	15 (49)	48 (135)	15 (35)	19 (82)	53 (132)
		NBR	150	85	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
		SBL	N/A	N/A	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
		SBR	200	100	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
2	SR 42 & Pine Grove Rd / Site Driveway	EBL	150*	150*	N/A	N/A	N/A	N/A	0 (0)	6 (26)
		EBTR	N/A	N/A	N/A	N/A	N/A	N/A	0 (0)	51 (156)
		WBLTR	N/A	N/A	6 (27)	18 (43)	8 (33)	28 (54)	24 (44)	30 (31)
		NBL	310*	100*	N/A	N/A	N/A	N/A	8 (26)	23 (47)
		NBR	N/A	N/A	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
		SBL	N/A	N/A	0 (0)	0 (0)	24 (60)	0 (0)	5 (21)	0 (0)
		SBR	250*	100*	N/A	N/A	N/A	N/A	0 (0)	0 (0)
4	SR 42 & Bill Gardner Pkwy	EBL	325	N/A	154 (254)	151 (262)	144 (212)	63 (138)	115 (223)	147 (335)
		EBR	325	N/A	100 (208)	274 (421)	112 (190)	287 (569)	80 (163)	197 (477)
		NBL	350	125	472 (480)	247 (409)	330 (472)	248 (409)	464 (492)	232 (434)
		SBR	325	100	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
5	Bill Gardner Pkwy & Market Place Blvd	EBL	150	50	70 (105)	139 (202)	53 (90)	128 (231)	118 (180)	199 (200)
		EBR	250	N/A	0 (0)	0 (0)	0 (0)	149 (640)	0 (0)	149 (640)
		WBL	140	50	28 (56)	189 (190)	10 (29)	188 (192)	43 (164)	189 (190)
		NBL	160	N/A	163 (249)	272 (349)	216 (320)	314 (489)	194 (234)	312 (359)
		NBLTR	160	N/A	111 (173)	296 (357)	180 (249)	445 (535)	155 (232)	319 (445)
		SBL	175	75	54 (89)	79 (111)	26 (45)	76 (130)	28 (71)	55 (91)
		SBR	350	N/A	90 (127)	0 (0)	199 (286)	20 (60)	117 (182)	29 (68)

** = proposed turn lane storage lengths and taper lengths in future conditions*

To receive the Notice of Decision Request for Non-Expedited DRI #3506 – Sansone Speculative Industrial Development, the following general conditions and roadway improvement conditions are recommended.

General Conditions:

Pedestrian, Bicycle, and Transit Facilities

- Provide internal pedestrian crossing and striping for on-site circulation between building uses.

Recommended Roadway Improvement Conditions of Approval:

SR 42 at Pine Grove Road / Site Driveway

- Install a dedicated northbound left turn lane on SR 42
- Install a dedicated southbound right turn deceleration lane on SR 42
- Install a dedicated left turn lane on Site Driveway 2
- Install a shared eastbound through/right turn lane on Site Driveway 2

Recommended Roadway Improvement Advisory Conditions:

SR 42 at Bethlehem Road / Michaels Drive

- Signalized traffic control with no lane geometry improvements

SR 42 at Bill Gardner Parkway

- Install a dual eastbound right turn lane on Bill Gardner Parkway with one (1) additional receiving lane on SR 42.

Bill Gardner Parkway at Market Place Boulevard

- Install dual northbound left turn lanes on Market Place Boulevard.
- Convert existing shared left/through/right lane to dedicated through lane and dedicated right turn lane on Market Place Boulevard.
- Install dual southbound right turn lanes on Market Place Boulevard
- Maintain existing southbound through and dedicated left turn lanes on Market Place Boulevard.
- Maintain Split Phasing on northbound and southbound approaches.
- Widen Bill Gardner Parkway from four-lanes to six-lanes

These conditions are based on the approved Methodology Meeting inputs and parameters identified in the Georgia Regional Transportation Authority (GRTA) Letter of Understanding (LOU), dated February 9, 2022. The GRTA LOU is attached at the end of this report for reference.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

A. Introduction

A new 882,200 square foot (sf) industrial development is proposed for construction west of State Route 42/US Highway 23 (SR 42) at Pine Grove Road, in Henry County, Georgia. The development will contain one (1) new full-access driveway along SR 42. The proposed driveway connection to SR 42 is planned to be aligned with the existing Pine Grove Road leg of the intersection.

The purpose of this assessment is to identify the traffic expected to be generated by new vehicular trips when the development is complete in the year 2023. The full traffic study includes existing traffic volumes (2022), future traffic volumes (2023), trip generation, directional distribution, and anticipated traffic impacts at the following intersections:

1. SR 42 at Bethlehem Road / Michaels Drive
2. SR 42 at Pine Grove Road / Site Driveway
3. SR 42 at Market Place Boulevard
4. SR 42 at Bill Gardner Parkway
5. Bill Gardner Parkway at Market Place Boulevard

Figure 1 shows the site location. Figure 2 shows an aerial of the area and the study intersections in relation to the site. The site plan is provided in Appendix A.

Figure 1. Vicinity Map

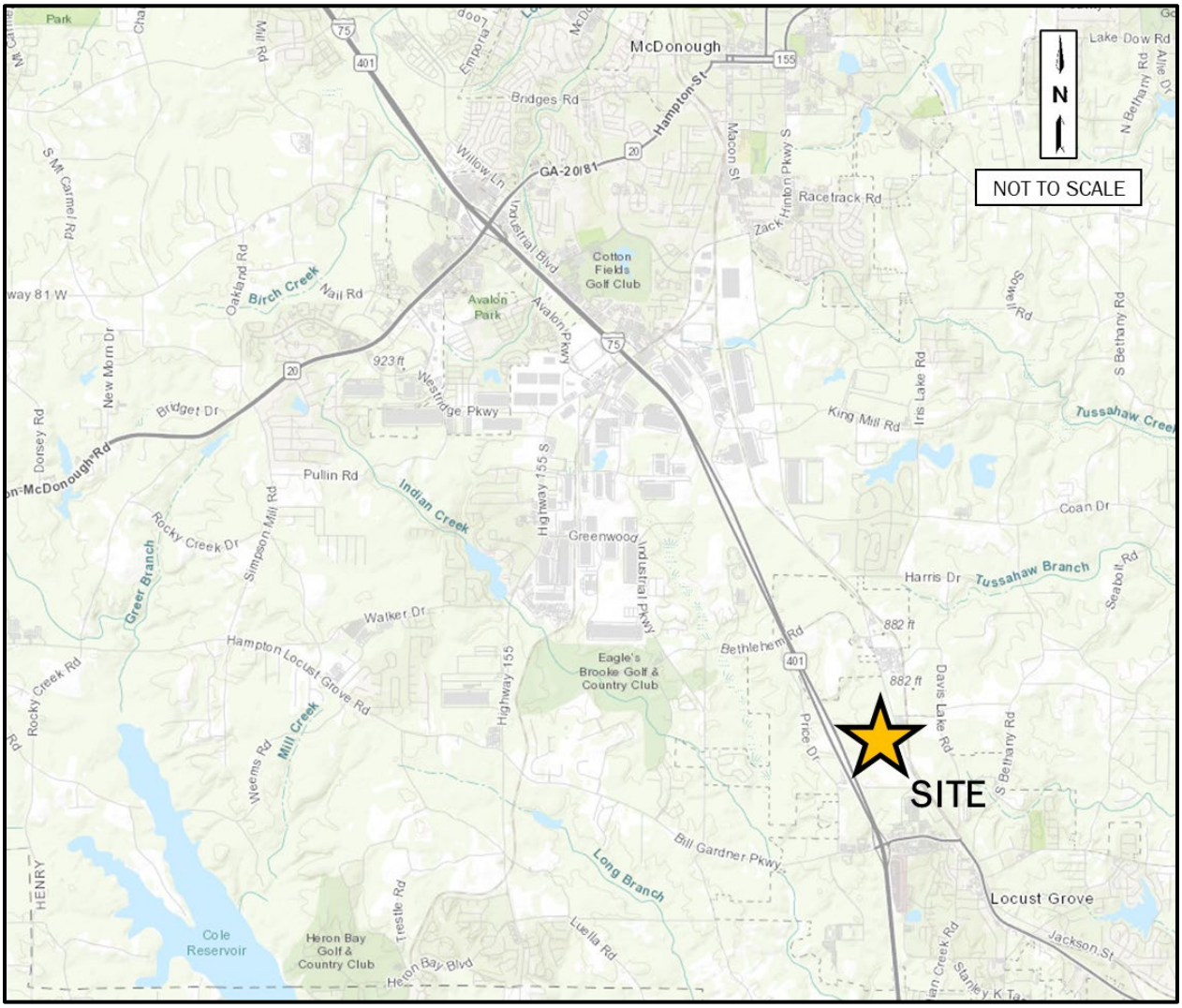
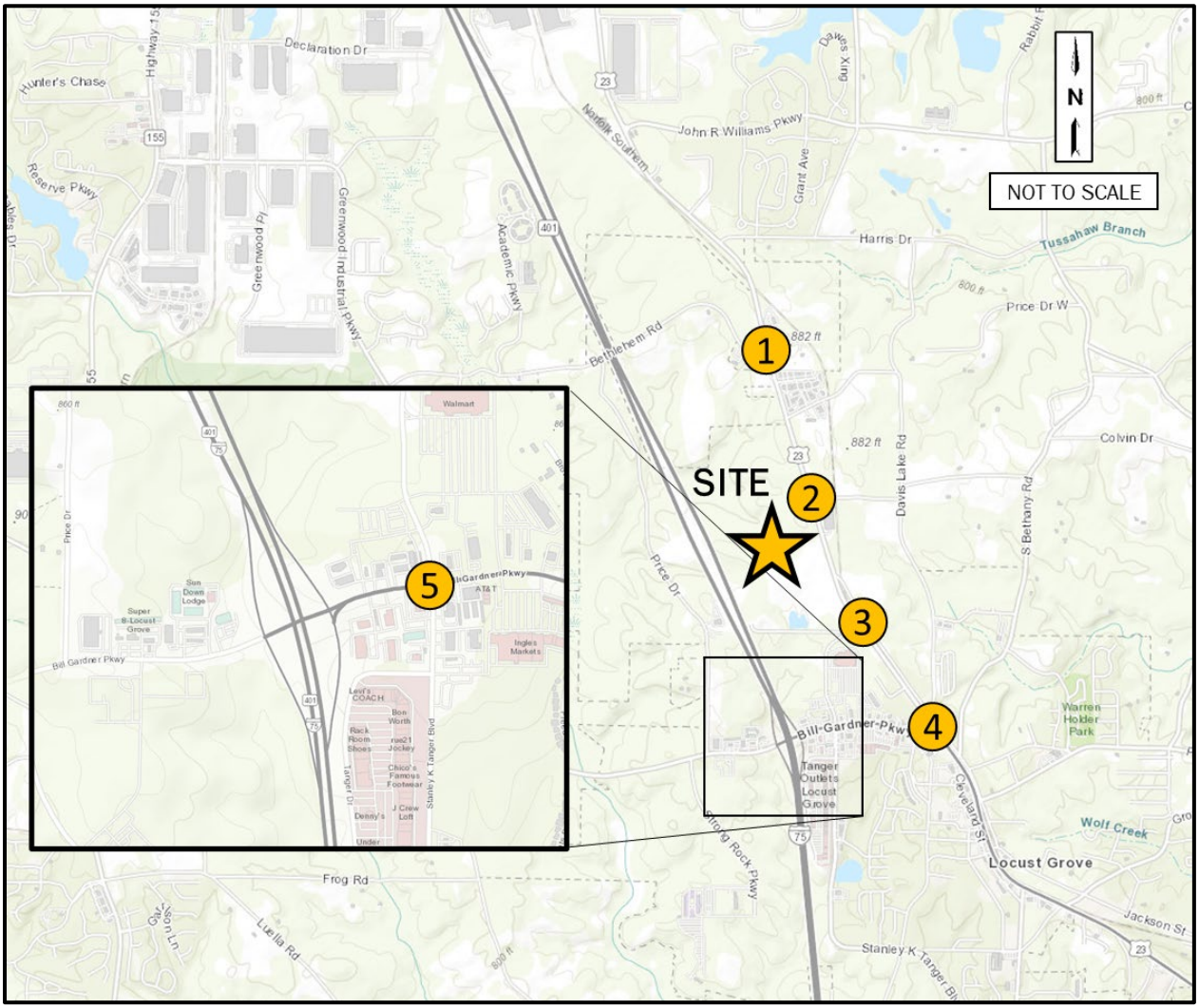


Figure 2. Site Location Aerial



LEGEND
1. SR 42 at Bethlehem Road / Michaels Drive
2. SR 42 at Pine Grove Road / Site Driveway
3. SR 42 at Market Place Boulevard
4. SR 42 at Bill Gardner Parkway
5. Bill Gardner Parkway at Market Place Boulevard

A.1. Programmed & Planned Regional Transportation Improvements

Regional transportation improvements were investigated using the Atlanta Regional Commission's (ARC's) Transportation Improvement Program (TIP), the GDOT GeoPI database, and the Henry County project databases to verify if any large-scale infrastructure projects are programmed in the immediate area.

Table 1 identifies major transportation improvements programmed near the proposed development. Table 2 identifies major transportation improvements planned near the proposed development. Programmed and planned project report scope details are provided in Appendix B.

Table 1: Programmed Projects Near Site

ID	Project Name	From / To Points:	Sponsor	GDOT PI #	ARC ID # (TIP)	Design FY	ROW / UTL FY	CST FY
A	SR 42 Signal Installation	SR 42/Market Place Boulevard Intersection	City of Locust Grove / Henry County	N/A	N/A	2022	2022	2022

By build-out, one (1) traffic signal control installation is programmed to replace the existing unsignalized traffic controls at SR 42 and Market Place Boulevard. This programmed project is within the general distance to the DRI location, which is located south of the proposed development in the study network. The DRI should not conflict with the programmed transportation project. The programmed traffic signal improvement on SR 42 are included in the No-Build and Build Conditions Analysis for this DRI.

A.2. Other Planned Infrastructure Projects

Planned infrastructure projects were also recorded from the ARC TIP, Henry County, and GDOT GeoPI databases for the Georgia Regional Transportation Authority (GRTA) and their record-keeping processes.

Table 2 identifies planned transportation improvement projects near the proposed development. Most of these planned projects either do not have an estimated design year confirmed or an established implementation year beyond the development construction year.

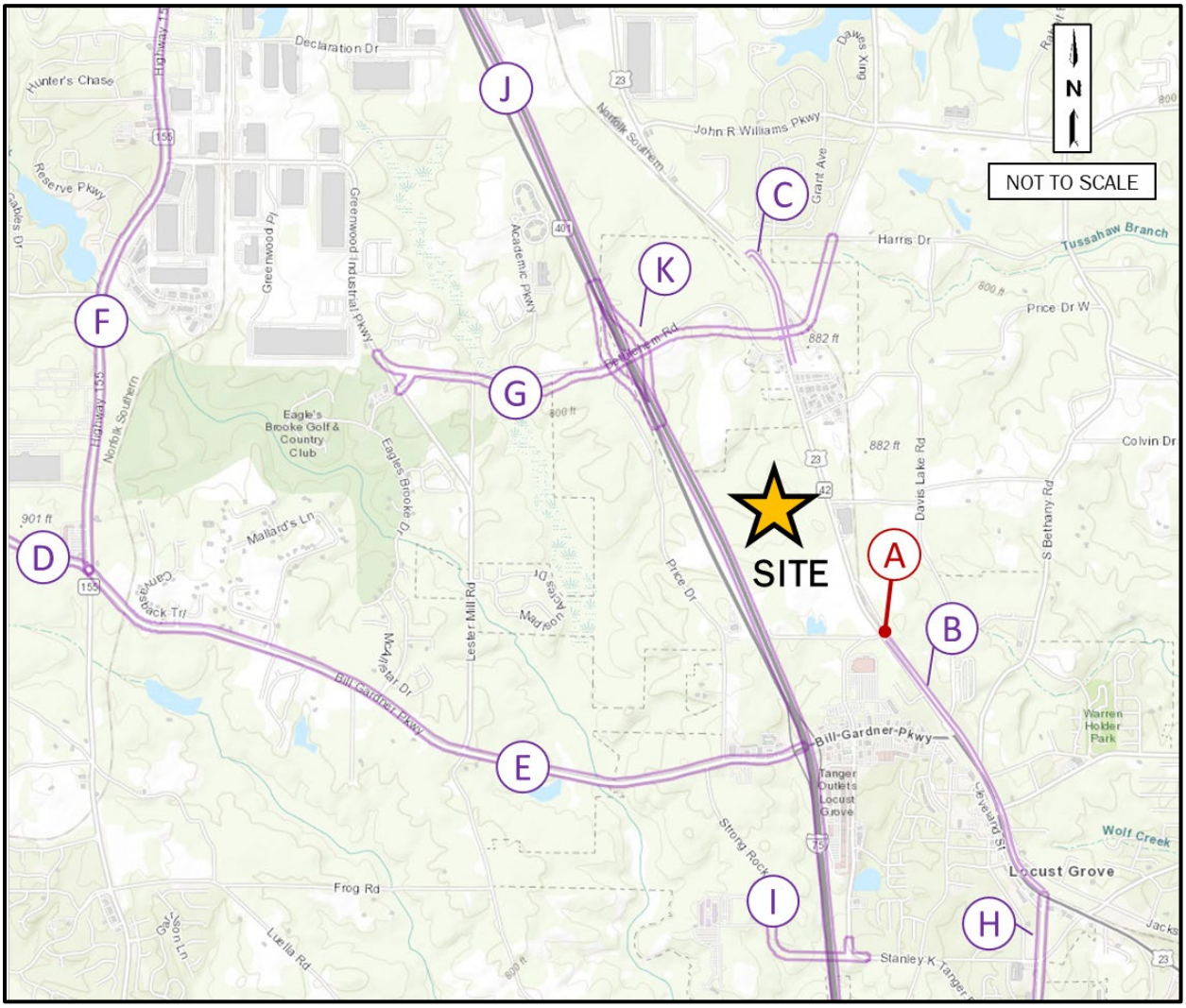
Table 2: Planned Projects Near Site

ID	Project Name	From / To Points:	Potential Sponsor	Project ID #	Project Timeline	Planning Document
B	SR 42 / US 23 Widening	Bill Gardner Parkway / Peeksville Road	GDOT	AC-202 / PI 0015823	TBD	ARC TIP / GeoPI
C	SR 42 Bridge Replacement	NS Line 5 / McDonough	GDOT	HE-201 / PI 0013955 / PI 0017770	TBD	ARC TIP / GeoPI
D	Hampton Locust Grove Road Widening	SR 20 / SR 155	Henry County	HE-126A1	2040	ARC TIP
E	Bill Gardner Parkway Widening	Lester Mill Road / I-75 South	Henry County / SPLOST	HE-126B / PI 0000562	2025-2026	ARC TIP
F	SR 155 Widening	I-75 South / Hampton Locust Grove Road & Bill Gardner Parkway	GDOT	HE-189 / PI 0015284	2040	ARC TIP
G	Bethlehem Road Extension & Realignment	Lester Mill Road / Iris Lake Road & Harris Drive	City of Locust Grove	HE-209	2040	ARC TIP
H	LG Griffin Road Widening	Hosannah Road / SR 42	City of Locust Grove	HE-210	2050	ARC TIP
I	Tanger Boulevard Realignment	Strong Rock Parkway / Tanger Boulevard	City of Locust Grove	HE-211	2050	ARC TIP
J	I-75 Commercial Vehicle Lanes	I-475 / SR 155	GDOT	AT-318	2030	ARC TIP
K	New I-75 Interchange	Bethlehem Road	Henry County	AR-955	2040	ARC TIP

The DRI should not conflict with other planned transportation projects. The ten (10) additional roadway improvement projects are programmed and planned for future years after the 2023 build-out year by City of Locust Grove, Henry County, and GDOT authorities. These programmed and planned projects are not evaluated in future conditions since they are projects that will be constructed after the 2023 build-out year.

Figure 3 shows the programmed and planned project locations in relation to the site.

Figure 3. Programmed and Planned Projects Near Site



TIP PROJECT ID LEGEND	
A.	PI # 0013955 (Programmed)
B.	AC-202 (Planned)
C.	HE-201 (Planned)
D.	HE-126A1 (Planned)
E.	HE-126B (Planned)
F.	HE-189 (Planned)
G.	HE-209 (Planned)
H.	HE-210 (Planned)
I.	HE-211 (Planned)
J.	AT-318 (Planned)
K.	AR-955 (Planned)

B. Existing Conditions

B.1. Project Phasing

The development is planned to be completed in a single phase by 2023.

B.2. Transportation Facilities and LOS Standards

SR 42 (US Highway 23) is a two-lane undivided minor arterial roadway with north/south orientation that connects the proposed development Site Driveway to Bill Gardner Parkway and Pine Grove Road. SR 42 has a posted speed limit of 55 miles per hour and primarily provides access to various residential and industrial land uses along its length.

Bill Gardner Parkway is a four-lane undivided minor arterial roadway with east/west orientation. The road runs between the I-75 interchange ramps to the west and SR 42 to the east. Bill Gardner Parkway has a posted speed limit of 35 miles per hour east of I-75 and a posted speed limit of 45 miles per hour west of I-75. Bill Gardner Parkway provides access to multiple commercial/retail land use full-access driveways and some residential neighborhood connector roadways along its length.

Market Place Boulevard is a two-lane undivided local roadway with north/south orientation. The road runs between Bill Gardner Parkway and SR 42 and has a posted speed limit of 35 miles per hour. Market Place Boulevard provides access to multiple commercial/retail land use full-access driveways along its length.

Pine Grove Road is a two-lane undivided local roadway with east/west orientation. Pine Grove Road intersects with SR 42 at the proposed development Site Driveway. It has a posted speed limit of 25 miles per hour and provides access to residential and commercial uses along its length.

Bethlehem Road is a two-lane undivided local roadway with east/west orientation. Bethlehem Road intersects with SR 42 approximately 0.3 miles north of the proposed development Site Driveway and has a truck restriction sign posted along its length. It has a posted speed limit of 45 miles per hour and provides access to residential, institutional, and some agricultural uses along its length.

LOS D is considered the minimum standard unless existing conditions are lower.

B.3. Transit

Transit accommodations are not present in the immediate area.

B.4. Pedestrian and Bicycle Facilities

There is no dedicated bicycle lane infrastructure present within the study area. One (1) on-road bicycle route exists southwest of the study network along Strong Rock Parkway, to and from the Strong Rock Christian School. Sidewalk presence is only on Bill Gardner Parkway, from SR 42 to the I-75 interchange ramps, and on Market Place Boulevard, between SR 42 and Bill Gardner Parkway.

B.5. Traffic Counts

Weekday AM and PM peak period turning movement counts (TMCs) were collected at the following locations on Wednesday, February 16, 2022:

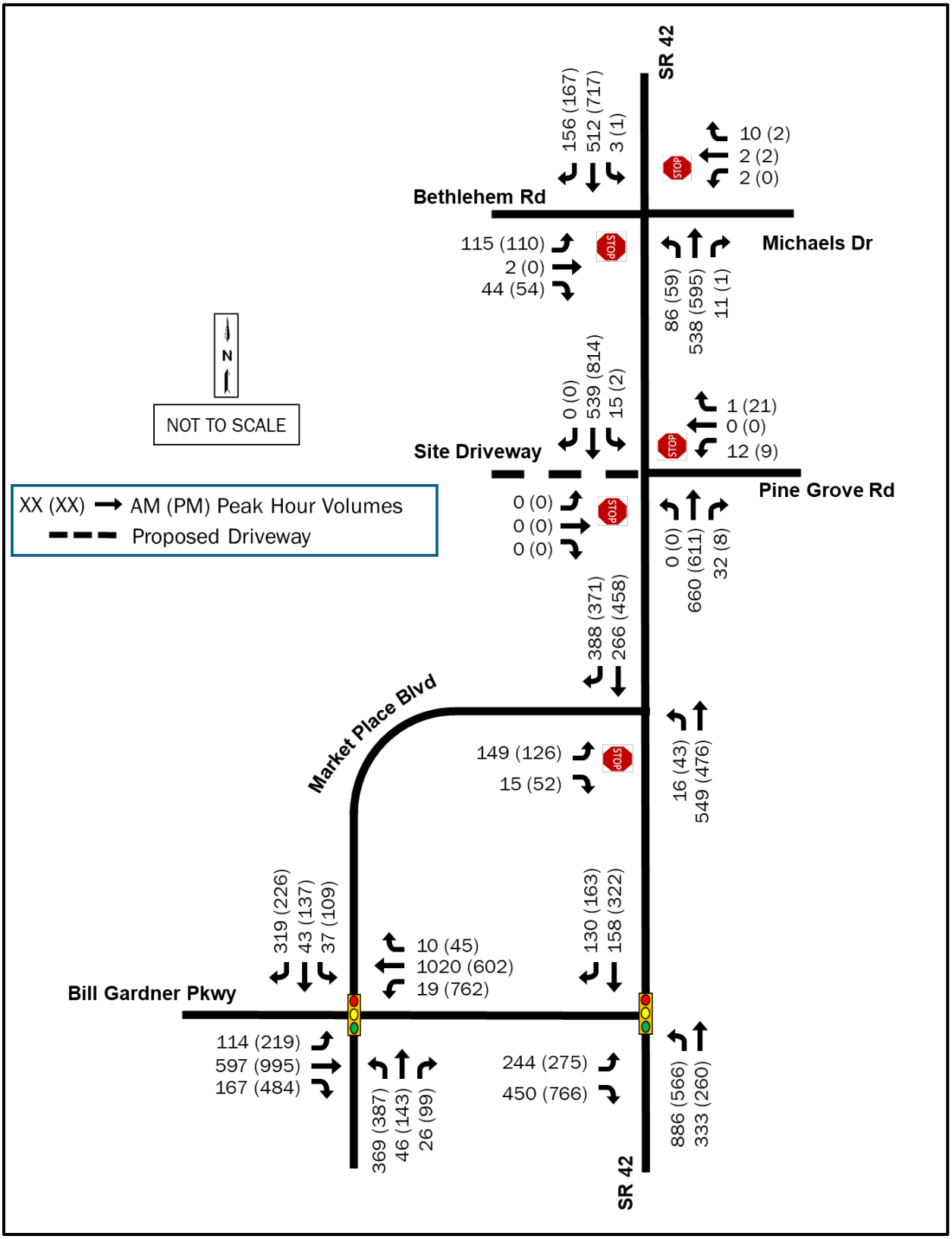
- SR 42 at Bethlehem Road
- SR 42 at Pine Grove Road / Site Driveway
- SR 42 at Market Place Boulevard
- SR 42 at Bill Gardner Parkway
- Bill Gardner Parkway at Market Place Boulevard

Additionally, 24-hour bi-directional counts were collected on SR 42, south of Pine Grove Road, on Wednesday, February 16, 2022.

Figure 4 depicts the existing AM peak hour and PM peak hour traffic volumes at these intersections.

The No-Build and Build scenarios in the study utilize these volumes as baseline conditions. Traffic Count Data is provided in Appendix C.

Figure 4. 2022 Existing Traffic Volumes



C. Future Conditions

C.1. Background Growth

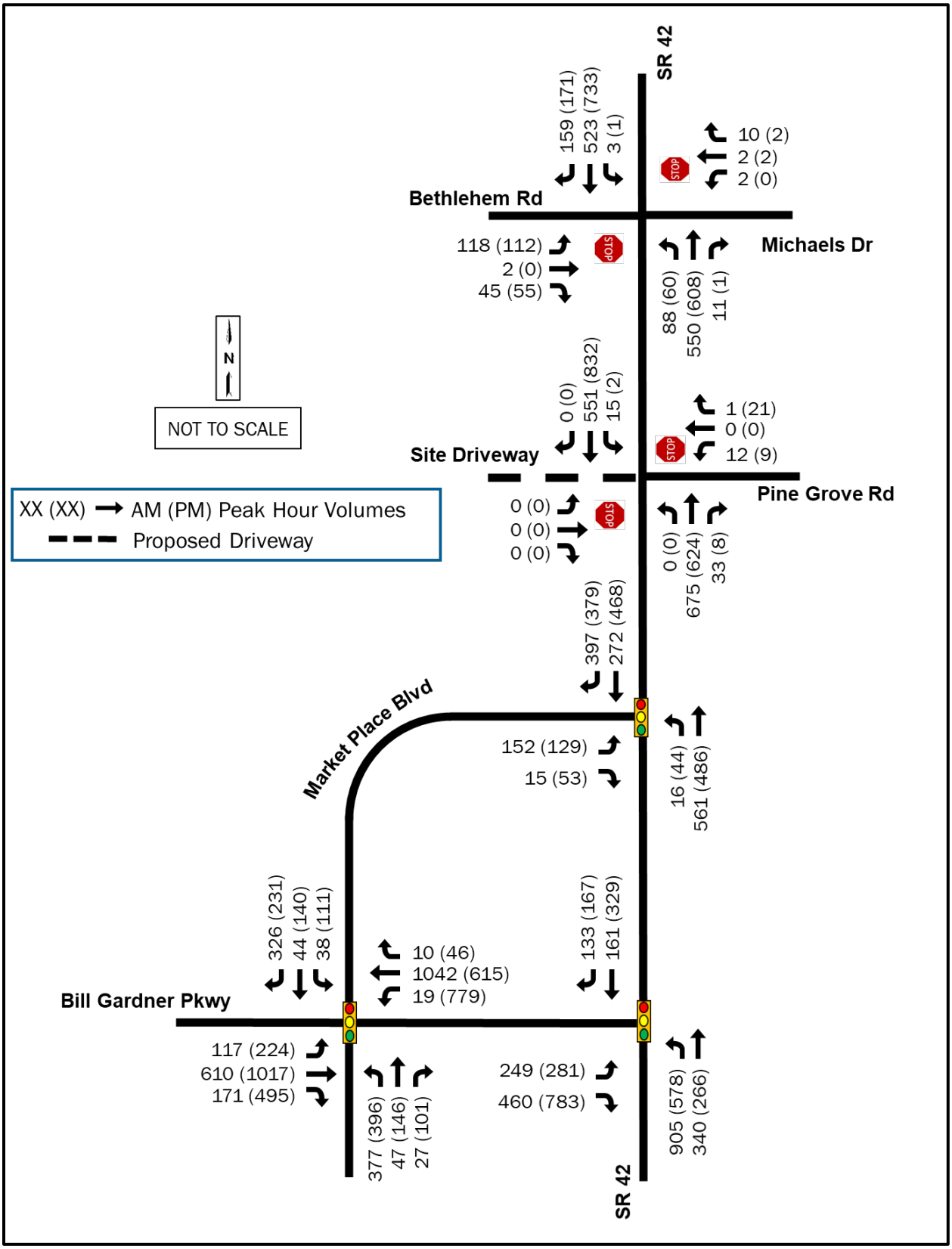
The growth rate in the study area is based on an analysis of historic traffic count data collected by the Georgia Department of Transportation (GDOT) and a collaboration with the Georgia Regional Transportation Authority (GRTA) during the DRI MMP Meetings held for this development.

The project is expected to be built out by the end of 2023. To account for future traffic growth, the 2022 base year traffic volumes were grown by 2.2% for one (1) year to develop the 2023 No-Build and 2023 Build Traffic Volumes. This growth rate is based on a collaboration with the Georgia Regional Transportation Authority (GRTA) during the DRI MMP Meetings held for this development.

Historic Traffic Count Data used to calculate the background growth is provided in Appendix D.

Figure 5 depicts the 2023 No-Build AM and PM peak hour traffic volumes, which also includes the programmed traffic signal improvement on the SR 42 at Market Place Boulevard intersection.

Figure 5. 2023 No-Build Traffic Volumes



C.2. Project Trip Generation

Table 3 summarizes the fitted curve AM and PM peak hour project trip generation calculated using the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 11th Edition, 2021.

Table 3: Project Trip Generation

Land Use	Code	Size (Square Feet)	Period	Total	Inbound	Outbound
Warehousing	150	882,200	Daily	1,432	716	716
			AM	129	99	30
			PM	132	37	95

The development will generate a total of 129 new trips (99 entering and 30 exiting) in the AM peak hour and 132 new trips (37 entering and 95 exiting) in the PM peak hour.

The site will generate trips by two (2) different vehicle types: personal auto vehicles and trucks (i.e., tractor trailers and /or box trucks). Table 4 summarizes the auto and truck trips that are associated with the total trips identified in the above Table 3 Project Trip Generation.

Table 4: Project Trip Generation – Auto and Truck Trips

Detailed Trip Generation by Vehicle Type	Period	Total	Inbound	Outbound
Autos	Daily	948	474	474
	AM	111	90	21
	PM	106	23	83
Trucks	Daily	484	242	242
	AM	18	9	9
	PM	26	14	12

The development will generate a total of 111 auto trips (90 entering and 21 exiting) and 18 truck trips (9 entering and 9 exiting) during the AM peak hour. During the PM peak hour, the development will generate a total of 106 personal vehicles trips (23 entering and 83 exiting) and 26 truck trips (14 entering and 12 exiting).

C.3. Trip Distribution and Assignment

The assignment and directional distribution of new project trips is based on existing traffic patterns observed in the overall study area.

From the trips generated, the vehicles will be distributed throughout the network via two (2) trip distributions as outlined below:

Personal Auto Vehicle Trip Distribution

- 75% of trips will travel to/from the south via SR 42 at Pine Grove Road
    - 40% of the tips will travel to/from the east via SR 42 and Market Place Boulevard
    - 30% of the trips will travel to/from the south via SR 42
    - 5% of the trips will travel to/from the east via SR 42 and Bill Gardner Parkway
- 20% of trips will travel to/from the north via SR 42
    - 10% of the trips will travel to/from the north via SR 42
    - 10% of the trips will travel to/from the east via Bethlehem Road
- 5% of trips will travel to/from the west via Pine Grove Road

Truck Vehicle Trip Distribution

- 20% of trips will travel to/from the north via SR 42
- 80% of trips will travel to/from the south via SR 42
    - 60% of the trips will travel to/from the east via SR 42 and Market Place Boulevard
    - 20% of the trips will travel to/from the east via SR 42 and Bill Gardner Parkway

All traffic, both personal auto vehicles and trucks, will enter and exit the site via SR 42.

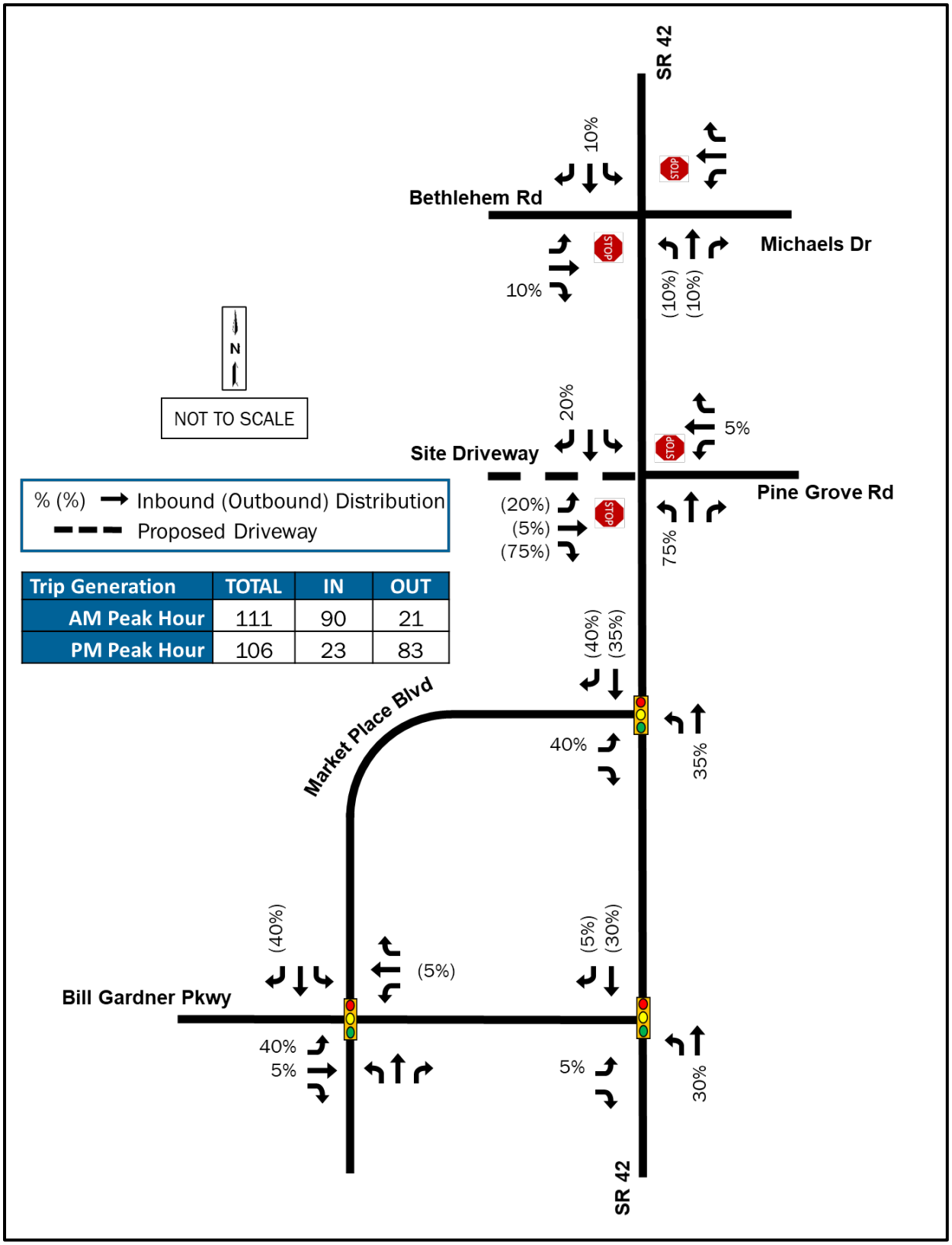
Figures 6 and 7 depict the trip distribution of new auto and truck trips, respectfully, to and from the proposed development.

Figures 8 and 9 depict the trip assignment of these new trips based on the distribution of traffic during the AM and PM peak hours.

Figure 10 depicts the combined auto and truck trip assignments based on the distribution of traffic during the AM and PM peak hours.

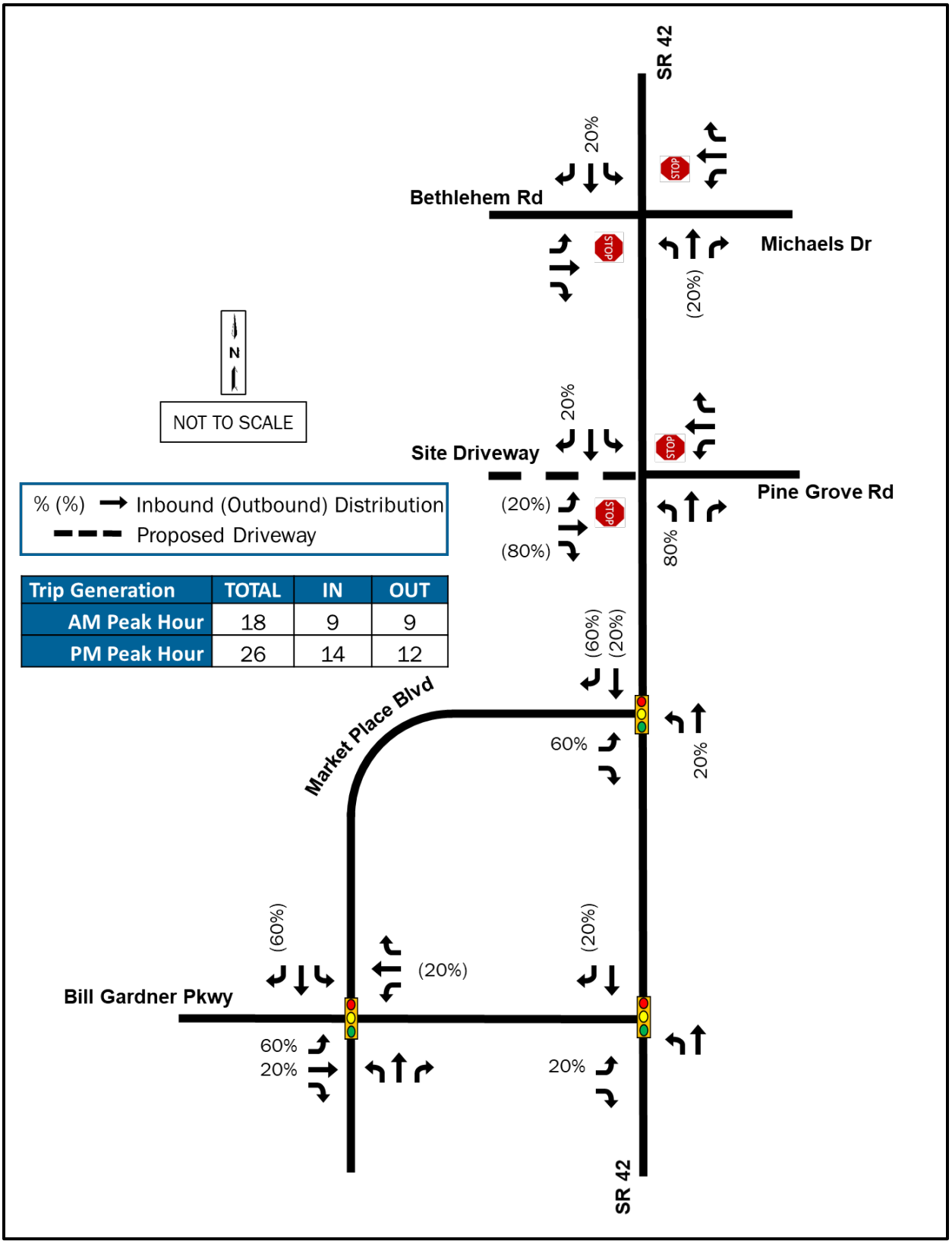
Figure 11 depicts the 2023 Build traffic volumes, which superimposes the 2023 No-Build traffic volumes from Figure 5 with the combined site traffic volumes in Figure 10.

Figure 6. Trip Distribution, Autos



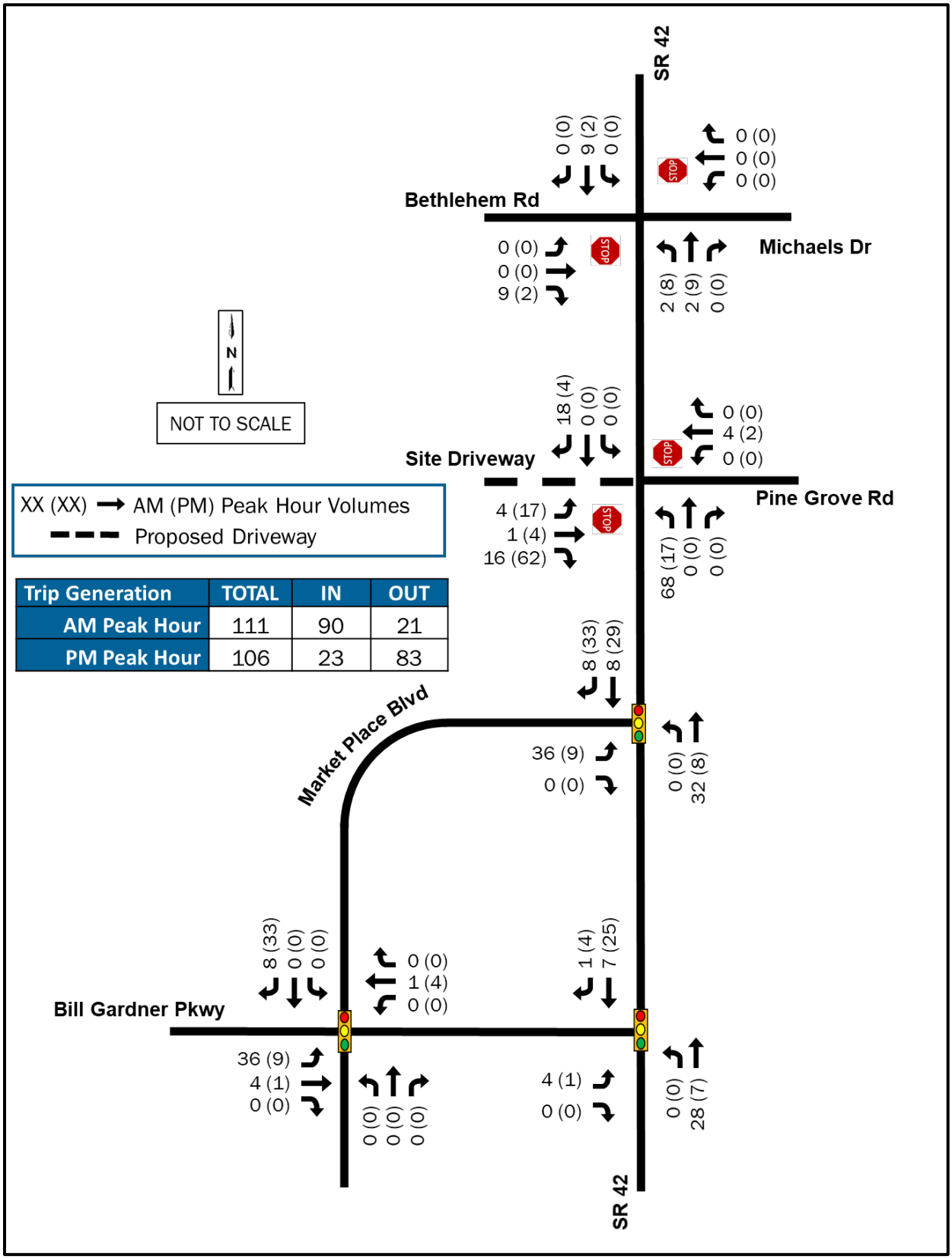
Trip Generation	TOTAL	IN	OUT
AM Peak Hour	111	90	21
PM Peak Hour	106	23	83

Figure 7. Trip Distribution, Trucks



Trip Generation	TOTAL	IN	OUT
AM Peak Hour	18	9	9
PM Peak Hour	26	14	12

Figure 8. Trip Assignment, Autos



Trip Generation	TOTAL	IN	OUT
AM Peak Hour	111	90	21
PM Peak Hour	106	23	83

Figure 9. Trip Assignment, Trucks

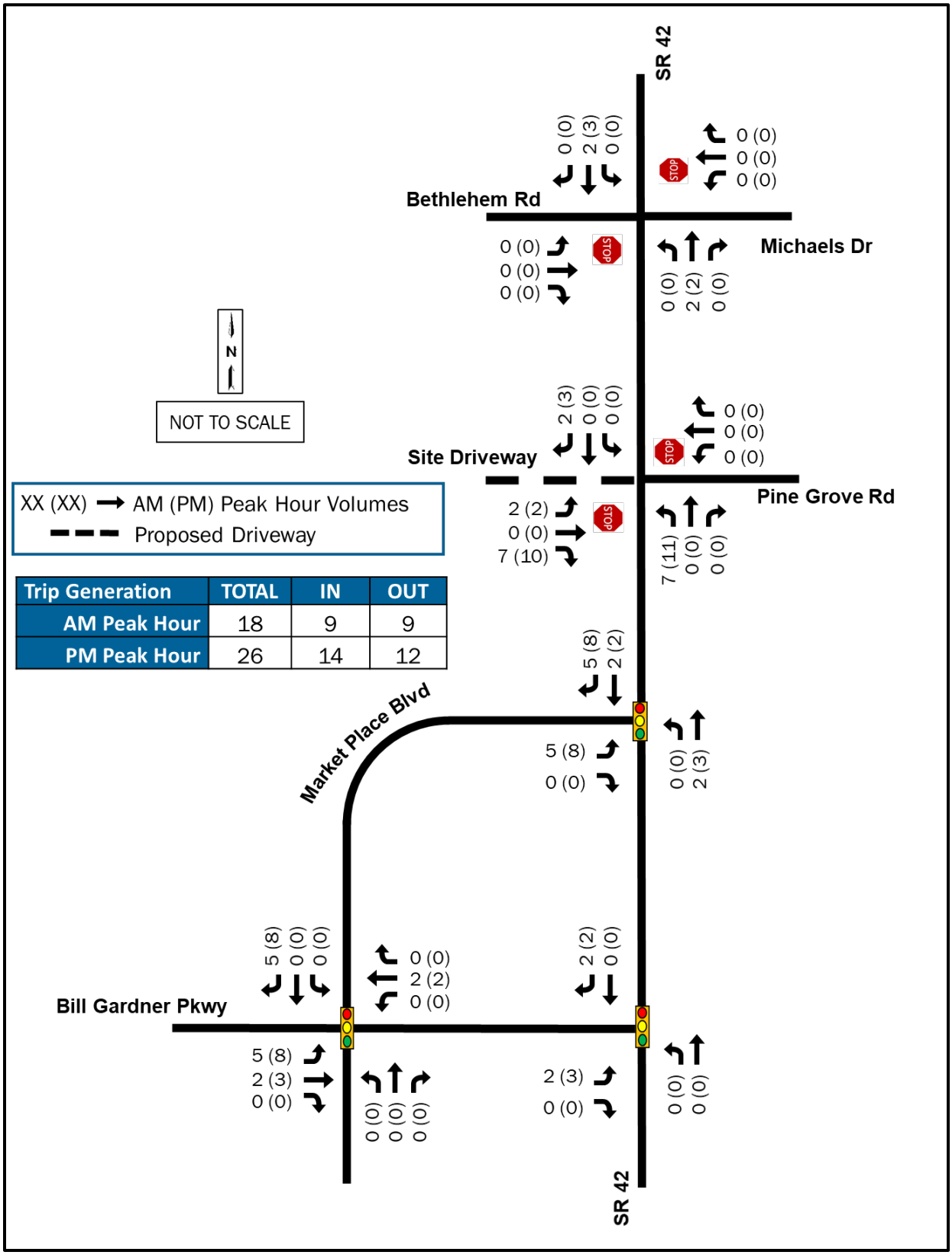
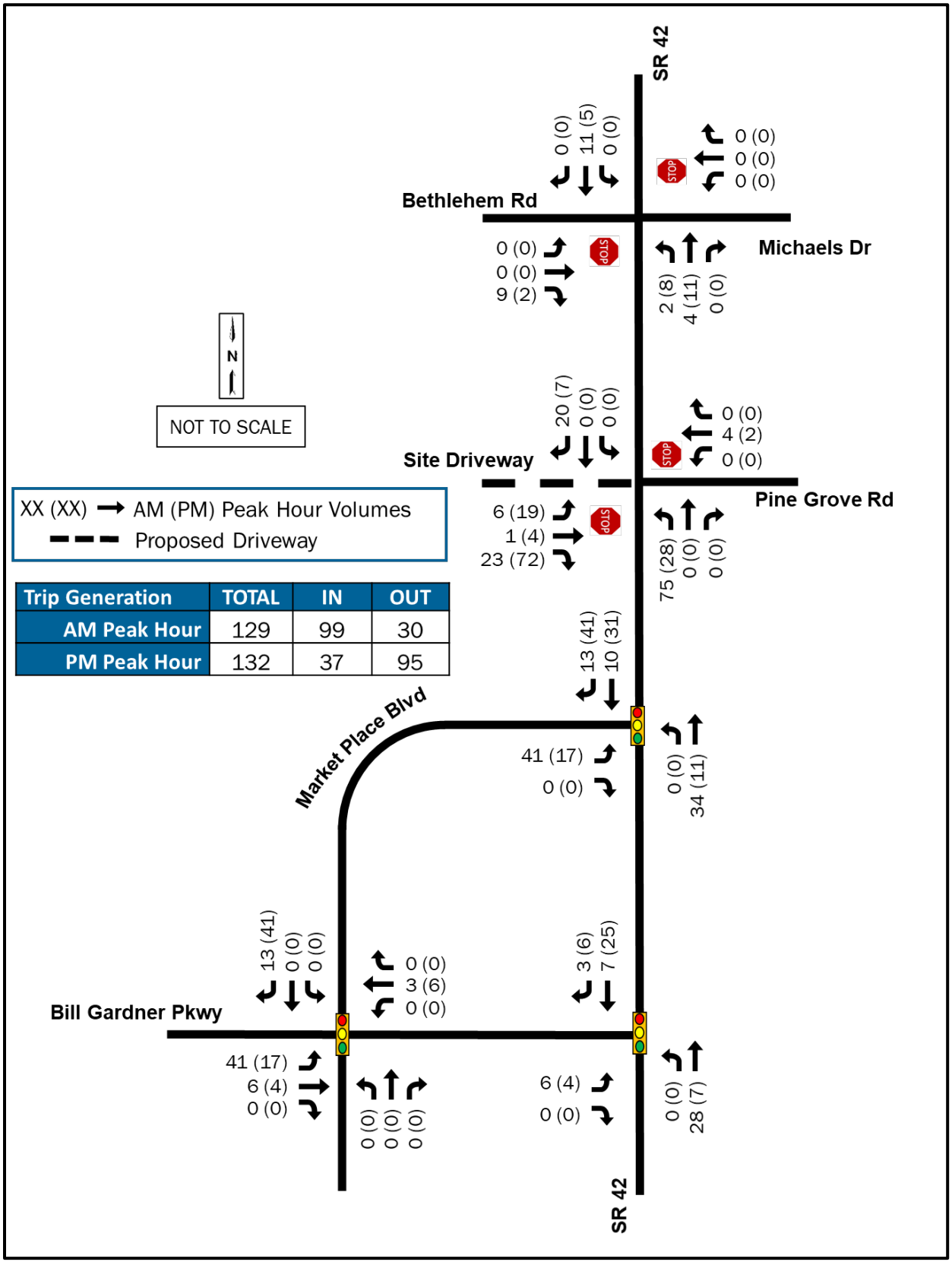
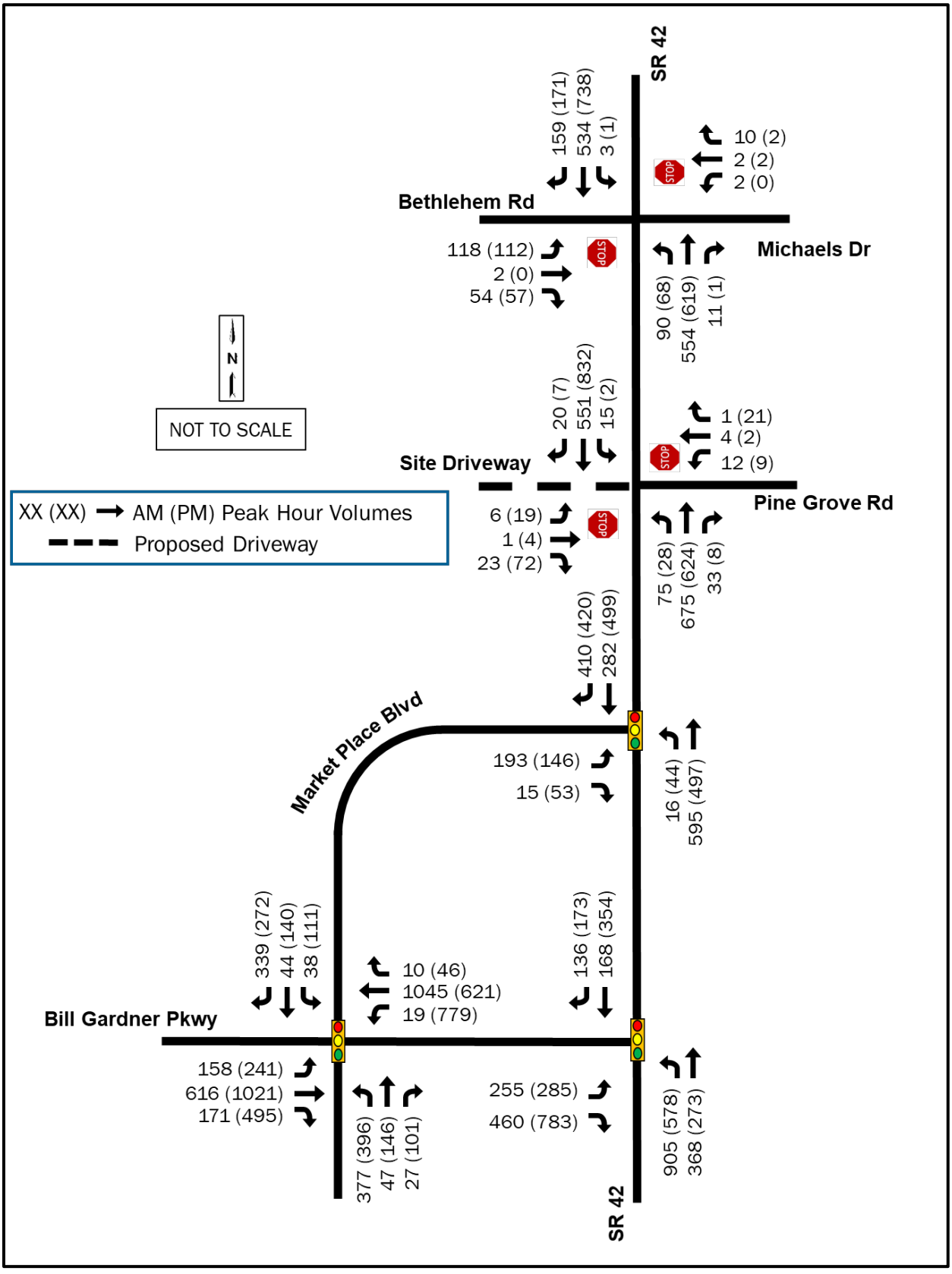


Figure 10. Trip Assignment, Combined Site Traffic (Autos and Trucks)



Trip Generation	TOTAL	IN	OUT
AM Peak Hour	129	99	30
PM Peak Hour	132	37	95

Figure 11. 2023 Build Traffic Volumes



D. Traffic Impact Analysis

The analysis in each of the scenarios for the study was performed using the traffic analysis software Synchro® 11. Average vehicular delays are calculated and reported as Levels of Service (LOS) as defined by the Highway Capacity Manual, 6th Edition (HCM 6).

Performance Criteria pertaining to the HCM methodology is shown in Table 5. The study considers an LOS D as a benchmark for acceptable intersection operation. Synchro® output reports for the study intersections are included in Appendix E.

Table 5: HCM Level-of-Service Performance Criteria

Average Delay (seconds/vehicle)		Level of Service (LOS)
Signalized Intersections	Unsignalized Intersections	
≤ 10.0	≤ 10.0	A
> 10 - 20	> 10 - 15	B
> 20 - 35	> 15 - 25	C
> 35 - 55	> 25 - 35	D
> 55 - 80	> 35 - 50	E
> 80.0	> 50.0	F

By build-out, one (1) traffic signal control installation is programmed to replace the existing unsignalized traffic controls at SR 42 and Market Place Boulevard. Ten (10) additional roadway improvement projects are programmed and planned for future years after the 2023 build-out year by City of Locust Grove, Henry County, and GDOT authorities. However, only the traffic signal control installation at SR 42 and Market Place Boulevard is evaluated in No-Build and Build Conditions since it is the only programmed project installed by the build-out year.

D.1. Existing Capacity Analysis

The results of the Existing Condition's capacity analysis are shown in Table 6 and include analysis of the volumes presented in Figure 4.

Table 6: Capacity Analysis Results –Existing Conditions

ID	Intersection	Control	Movement	AM		PM	
				LOS	Delay	LOS	Delay
1	SR 42 & Bethlehem Rd / Michaels Dr	Stop-Control	**Overall**	**E**	**45.8**	**D**	**29.6**
			EB	F	413.2	F	304.4
			WB	D	29.1	D	25.8
			NBL	A	9.9	A	9.5
			SBL	A	8.8	B	10.8
2	SR 42 & Pine Grove Rd / Site Driveway	Stop-Control	**Overall**	**A**	**0.6**	**A**	**0.5**
			EB	N/A	N/A	N/A	N/A
			WB	E	41.7	D	25.6
			NBL	N/A	N/A	N/A	N/A
			SBL	A	9.6	A	8.9
3	SR 42 & Market Place Blvd	Stop-Control	**Overall**	**A**	**4.8**	**A**	**3.7**
			EBL	E	42.7	E	37.3
			EBR	B	10.0	B	11.7
			NBL	A	7.9	A	8.5
4	SR 42 & Bill Gardner Pkwy	Signal	**Overall**	**D**	**53.2**	**F**	**82.7**
			EB	E	66.7	F	127.3
			NB	D	51.1	D	52.8
			SB	C	29.6	D	37.8
5	Bill Gardner Pkwy & Market Place Blvd	Signal	**Overall**	**D**	**40.3**	**F**	**140.5**
			EB	C	20.3	F	99.5
			WB	D	41.4	F	160.7
			NB	D	50.9	F	186.9
			SB	E	69.9	F	162.8

As shown in Table 6, the following existing conditions are identified for each associated study intersection:

SR 42 at Bethlehem Road / Michaels Drive

The intersection operates at Levels of Service (LOS) E during the AM peak hour and LOS D during the PM peak hour. The eastbound approach operates at LOS F during the AM and PM peak hours. All other intersection approaches operate at LOS D or better during both peak hours.

SR 42 at Pine Grove Road / Site Driveway

The intersection and all its approaches operate at LOS D or better during the AM and PM peak hours, except for the westbound approach. The westbound approach operates at LOS E during the AM peak hour.

SR 42 at Market Place Boulevard

The intersection and all its approaches operate at LOS B or better during the AM and PM peak hours, except for the eastbound left turn lane approach. The eastbound left turn lane approach operates at LOS E during the AM and PM peak hours.

SR 42 at Bill Gardner Parkway

The signalized intersection currently operates at LOS F during the PM peak hour. The eastbound approach of the intersection currently operates at LOS E during the AM peak hour and LOS F during the PM peak hour. The northbound and southbound approaches operate at LOS D or better during both peak hours.

Bill Gardner Parkway at Market Place Boulevard

The signalized intersection and its approaches operate at LOS D or better during the AM peak hour, except for the southbound approach. The southbound approach currently operates at LOS E during the AM peak hour. Additionally, the signalized intersection and its approaches currently operate at LOS F during the PM peak hour.

D.2. 2023 No-Build Capacity Analysis

The results of the 2023 No-Build Condition's capacity analysis are shown in Table 7 and include analysis of the volumes presented in Figure 5, as well as the programmed traffic signal control improvement at the SR 42 and Market Place Boulevard intersection.

Table 7: Capacity Analysis Results – 2023 No-Build Conditions

ID	Intersection	Control	Movement	AM		PM	
				LOS	Delay	LOS	Delay
1	SR 42 & Bethlehem Rd / Michaels Dr	Stop-Control	**Overall**	**F**	**54.7**	**D**	**34.5**
			EB	F	493.6	F	356.6
			WB	D	30.4	D	26.7
			NBL	A	9.9	A	9.6
			SBL	A	8.9	B	10.9
2	SR 42 & Pine Grove Rd / Site Driveway	Stop-Control	**Overall**	**A**	**0.6**	**A**	**0.5**
			EB	N/A	N/A	N/A	N/A
			WB	E	43.7	D	26.6
			NBL	N/A	N/A	N/A	N/A
			SBL	A	9.7	A	8.9
3	SR 42 & Market Place Blvd	Signal	**Overall**	**A**	**7.1**	**A**	**6.6**
			EB	B	13.6	B	11.1
			NB	A	7.0	A	6.2
			SB	A	5.6	A	5.9
4	SR 42 & Bill Gardner Pkwy	Signal	**Overall**	**E**	**57.9**	**F**	**89.2**
			EB	E	71.1	F	137.7
			NB	E	57.0	E	58.0
			SB	C	29.8	D	38.3
5	Bill Gardner Pkwy & Market Place Blvd	Signal	**Overall**	**D**	**42.4**	**F**	**148.1**
			EB	C	20.5	F	106.1
			WB	D	43.0	F	168.6
			NB	D	52.2	F	197.6
			SB	E	78.3	F	169.4

As shown in Table 7, the following conditional changes are identified for each associated study intersection:

SR 42 at Bethlehem Road / Michaels Drive

The intersection changes to LOS F during the AM peak hour and maintains LOS D during the PM peak hour. The eastbound approach continues to operate at LOS F during the AM and PM peak hours. All other intersection approaches continue to operate at LOS D or better during both peak hours.

SR 42 at Pine Grove Road / Site Driveway

The intersection and all its approaches continue to operate at LOS D or better during the AM and PM peak hours, except for the westbound approach. The westbound approach maintains LOS E during the AM peak hour.

SR 42 at Market Place Boulevard

Analysis indicates that with the signalized intersection facility improvements in place, the intersection and all its approaches will operate at LOS B or better during the AM and PM peak hours.

SR 42 at Bill Gardner Parkway

The signalized intersection operates at a changed LOS E during the AM peak hour and maintains a LOS F during the PM peak hour. The eastbound approach of the intersection maintains LOS E during the AM peak hour and LOS F during the PM peak hour. The northbound approach changes to LOS E during the AM and PM peak hours, and the southbound approach continues to operate at LOS D or better during both peak hours.

Bill Gardner Parkway at Market Place Boulevard

The signalized intersection and its approaches continue to operate at LOS D or better during the AM peak hour, except for the southbound approach. The southbound maintains LOS E during the AM peak hour. Additionally, the signalized intersection and its approaches maintain their LOS F during the PM peak hour.

D.3. Minimum Modeling Improvements Needed

Minimum improvements needed in the study network are signal split improvements to existing cycle lengths at the following intersections to accommodate future traffic volumes:

- SR 42 at Market Place Boulevard
- SR 42 at Bill Gardner Parkway
- Bill Gardner Parkway at Market Place Boulevard

Signalized timing improvements to existing cycle length splits, and optimized splits to the programmed signal at SR 42 and Market Place Boulevard, are the only feasible options at these intersections before additional mitigations are evaluated.

Additionally, minimum improvements needed at the proposed SR 42 at Pine Grove Road/Site Driveway intersection to accommodate future entering/exiting site traffic volumes include:

- Northbound left turn lane on SR 42, with minimum 310-foot storage and 100-foot taper
- Southbound right turn deceleration lane on SR 42, with minimum 250-foot storage and 100-foot taper
- Eastbound left turn lane on Site Driveway 2, with minimum 150-foot storage and 100-foot taper

D.4. 2023 Build Capacity Analysis

The results of the 2023 Build Condition's capacity analysis are shown in Table 8 and includes analysis of the volumes presented in Figure 11 with optimized signal timing conditions.

Table 8: Capacity Analysis Results – 2023 Build Conditions

ID	Intersection	Control	Movement	AM		PM	
				LOS	Delay	LOS	Delay
1	SR 42 & Bethlehem Rd / Michaels Dr	Stop-Control	**Overall**	**F**	**60.6**	**E**	**39.1**
			EB	F	528.1	F	405.4
			WB	D	31.9	D	28.3
			NBL	B	10.0	A	9.6
			SBL	A	8.9	B	11.0
2	SR 42 & Pine Grove Rd / Site Driveway	Stop-Control	**Overall**	**A**	**2.0**	**A**	**2.8**
			EBL	F	63.9	F	76.7
			EB	C	24.7	D	33.2
			WB	F	69.4	E	38.7
			NBL	A	9.2	A	9.9
			SBL	A	9.7	A	8.9
3	SR 42 & Market Place Blvd	Signal	**Overall**	**A**	**8.1**	**A**	**6.8**
			EB	B	14.6	B	11.7
			NB	A	8.0	A	6.2
			SB	A	6.2	A	6.1
4	SR 42 & Bill Gardner Pkwy	Signal	**Overall**	**E**	**68.5**	**F**	**109.9**
			EB	F	161.5	F	204.9
			NB	C	25.9	C	34.4
			SB	C	28.3	D	39.3
5	Bill Gardner Pkwy & Market Place Blvd	Signal	**Overall**	**D**	**47.0**	**F**	**156.1**
			EB	C	20.5	F	106.8
			WB	D	42.8	F	168.5
			NB	D	51.9	F	197.6
			SB	F	112.0	F	233.4

As shown in Table 8, the following conditional changes are identified for each associated study intersection:

SR 42 at Bethlehem Road / Michaels Drive

The intersection changes LOS E during the PM peak hour. The eastbound approach continues to operate at LOS F during the AM and PM peak hours. All other intersection approaches continue to operate at LOS D or better during both peak hours.

SR 42 at Pine Grove Road / Site Driveway

The intersection and all its approaches continue to operate at LOS D or better during the AM and PM peak hours, except for the westbound approach. The westbound approach changes LOS F during the AM peak hour and LOS E during the PM peak hour. In the AM peak hour, only four (4) additional trips are added to this approach. In the PM peak hour, only two (2) additional trips are added to this approach. Additionally, the eastbound left turn lane at the site driveway operates at LOS F during both the AM and PM peak hours. However, the overall eastbound approach operates at LOS C during the AM peak hour and LOS D during the PM peak hour, as identified in Table 8 and Appendix E.

SR 42 at Market Place Boulevard

Analysis indicates that the signalized intersection and all its approaches continue operating at LOS B or better during the AM and PM peak hours.

SR 42 at Bill Gardner Parkway

Analysis indicates that with the optimized cycle length splits at the signalized intersection, the overall intersection maintains a LOS E during the AM peak hour and LOS F during the PM peak hour. The eastbound approach of the intersection changes to LOS F during the AM peak hour and maintains LOS F during the PM peak hour. However, the northbound and southbound approaches are anticipated to operate at LOS D or better during the AM and PM peak hours with the optimized cycle length splits applied.

Bill Gardner Parkway at Market Place Boulevard

Analysis indicates that with the optimized cycle length splits at the signalized intersection, the overall intersection maintains LOS D during the AM peak hour. However, the southbound approach changes to LOS F during the AM peak hour. Additionally, the signalized intersection and its approaches maintain their LOS F during the PM peak hour.

D.5. Heavy Vehicle Enhanced Focus Area

The planned development is an industrial land use that is expected to generate heavy vehicles. Routes that heavy vehicles are expected to take at and around the study network are identified in Figure 7 and Figure 9. An inventory of existing and proposed pavement conditions, roadway widths, corner radii heavy vehicle staging, and pedestrian safety are included in Appendix F.

D.6. Queue Length Analysis

Queue length analysis was conducted for all intersection approaches with a failing LOS where the project is adding additional trips to that approach. Queue length analysis results are modeled according to Highway Capacity Manual procedures, using the traffic analysis software Synchro® 11. Queue lengths reported on include 50th percentile (average) queues, 95th percentile queues, existing storage lengths, and existing taper lengths to intersection approaches.

Table 9 shows intersection queue results comparing Existing, No-Build, and Build Conditions. An inventory of queue length output reports is also included in Appendix G. With the installation of a traffic signal at the SR 42 and Market Place Boulevard intersection, the overall intersection and its approaches are expected to operate at LOS B or better during each peak hour.

Queueing analysis suggests that the existing roadway facilities in the study may become overloaded under future traffic conditions. The additional traffic expected to be generated by the proposed site is also expected to contribute to the delays and queues identified at each intersection.

Table 9: Queue Analysis Comparisons

ID	Intersection	Turn Lane / Movement Approach	50th (95th) Percentile Queues, in feet							
			Lengths, in feet		Existing		No-Build		Build	
			Storage	Taper	AM	PM	AM	PM	AM	PM
1	SR 42 & Bethlehem Rd/Michaels Dr	EBLTR	N/A	N/A	86 (129)	112 (175)	76 (142)	50 (90)	73 (134)	156 (262)
		WBLTR	N/A	N/A	23 (57)	0 (0)	8 (36)	0 (0)	0 (0)	4 (19)
		NBL	N/A	N/A	45 (93)	15 (49)	48 (135)	15 (35)	19 (82)	53 (132)
		NBR	150	85	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
		SBL	N/A	N/A	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
		SBR	200	100	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
2	SR 42 & Pine Grove Rd / Site Driveway	EBL	150*	150*	N/A	N/A	N/A	N/A	0 (0)	6 (26)
		EBTR	N/A	N/A	N/A	N/A	N/A	N/A	0 (0)	51 (156)
		WBLTR	N/A	N/A	6 (27)	18 (43)	8 (33)	28 (54)	24 (44)	30 (31)
		NBL	310*	100*	N/A	N/A	N/A	N/A	8 (26)	23 (47)
		NBR	N/A	N/A	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
		SBL	N/A	N/A	0 (0)	0 (0)	24 (60)	0 (0)	5 (21)	0 (0)
		SBR	250*	100*	N/A	N/A	N/A	N/A	0 (0)	0 (0)
3	SR 42 & Market Place Blvd	EBL	250	100	61 (95)	29 (58)	44 (95)	46 (91)	107 (160)	56 (92)
		EBR	250	N/A	0 (0)	5 (22)	0 (0)	5 (21)	0 (0)	0 (0)
		NBL	250	135	0 (0)	10 (31)	3 (14)	18 (65)	0 (0)	6 (24)
		SBR	150	150	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
4	SR 42 & Bill Gardner Pkwy	EBL	325	N/A	154 (254)	151 (262)	144 (212)	63 (138)	115 (223)	147 (335)
		EBR	325	N/A	100 (208)	274 (421)	112 (190)	287 (569)	80 (163)	197 (477)
		NBL	350	125	472 (480)	247 (409)	330 (472)	248 (409)	464 (492)	232 (434)
		SBR	325	100	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
5	Bill Gardner Pkwy & Market Place Blvd	EBL	150	50	70 (105)	139 (202)	53 (90)	128 (231)	118 (180)	199 (200)
		EBR	250	N/A	0 (0)	0 (0)	0 (0)	149 (640)	0 (0)	149 (640)
		WBL	140	50	28 (56)	189 (190)	10 (29)	188 (192)	43 (164)	189 (190)
		NBL	160	N/A	163 (249)	272 (349)	216 (320)	314 (489)	194 (234)	312 (359)
		NBLTR	160	N/A	111 (173)	296 (357)	180 (249)	445 (535)	155 (232)	319 (445)
		SBL	175	75	54 (89)	79 (111)	26 (45)	76 (130)	28 (71)	55 (91)
		SBR	350	N/A	90 (127)	0 (0)	199 (286)	20 (60)	117 (182)	29 (68)

** = proposed turn lane storage lengths and taper lengths in future conditions*

D.7. Additional Modeling Improvements Needed

The following study intersections need additional intersection lane geometry and traffic control improvements implemented to operate at the acceptable GRTA LOS thresholds in future years:

SR 42 at Bethlehem Road / Michaels Drive

- Signalized traffic control with no lane geometry improvements

SR 42 at Bill Gardner Parkway

- Install a dual eastbound right turn lane on Bill Gardner Parkway with one (1) additional receiving lane on SR 42.

Bill Gardner Parkway at Market Place Boulevard

- Install dual northbound left turn lanes on Market Place Boulevard.
- Convert existing shared left/through/right lane to dedicated through lane and dedicated right turn lane on Market Place Boulevard.
- Install dual southbound right turn lanes on Market Place Boulevard
- Maintain existing southbound through and dedicated left turn lanes on Market Place Boulevard.
- Maintain Split Phasing on northbound and southbound approaches.
- Widen Bill Gardner Parkway from four-lanes to six-lanes

The signalized control mitigation on SR 42 at Bethlehem Road/Michaels Drive was evaluated using the Manual on Uniform Traffic Control Devices (MUTCD) Signal Warrant 2 thresholds, which is provided in Appendix H.

These additional mitigations in the study network are based on the capacity analysis results identified for movements failing with LOS E or worse between existing and future years with the following future conditions already incorporated in the future scenarios evaluated:

- The programmed signal improvement at SR 42 and Market Place Boulevard
- The Build Condition signal optimization modifications incorporated in the study network
- The queue analysis conducted for the study intersections

D.8. 2023 Build Mitigation Capacity Analysis

The results of the 2023 Build Mitigation Condition's capacity analysis are shown in Table 10. These results include analysis of the volumes presented in Figure 11 with optimized signal timing conditions and the additional modeling improvements identified in Section D.7. Build Mitigation capacity analysis reports are provided in Appendix I.

Table 10: Capacity Analysis Results – 2023 Build Mitigation Conditions

ID	Intersection	Mitigation Measure	Movement	AM		PM	
				LOS	Delay	LOS	Delay
1	SR 42 & Bethlehem Rd / Michaels Dr	Signal	**Overall**	**A**	**9.5**	**A**	**8.0**
			EB	C	21.7	B	18.6
			WB	B	18.3	B	15.7
			NB	A	9.7	A	7.7
			SB	A	6.1	A	6.2
4	SR 42 & Bill Gardner Pkwy	Signal and Lane Geometry Improvement	**Overall**	**C**	**29.5**	**C**	**34.6**
			EB	D	43.6	D	38.3
			NB	C	22.5	C	29.9
			SB	C	25.4	C	34.8
5	Bill Gardner Pkwy & Market Place Blvd	Signal and Lane Geometry Improvement	**Overall**	**C**	**24.6**	**F**	**83.1**
			EB	B	15.1	E	75.3
			WB	C	25.2	E	77.4
			NB	C	34.4	F	100.6
			SB	C	34.0	F	103.5

Analysis indicates that the study intersections with associated mitigations are expected to operate at acceptable (Levels of Service) LOS D or better, except for the Bill Gardner Parkway at Market Place Boulevard intersection during the PM peak hour. Comparing Build Condition LOS results with Build Mitigation Condition LOS results, the overall control delay at this intersection reduces by 73 seconds with lane geometry improvements implemented. The eastbound and westbound approaches improve from LOS F to LOS E during the PM peak hour. However, the northbound and southbound approaches maintain LOS F even though control delays are reduced by half when compared to Build Conditions.

E. Conclusion

A new 882,200 square foot (sf) industrial development is proposed for construction west of State Route 42/US Highway 23 (SR 42) at Pine Grove Road, in Henry County, Georgia. The development will contain one (1) new full-access driveway along SR 42. The proposed driveway connection to SR 42 is planned to be aligned with the existing Pine Grove Road leg of the intersection.

The development is expected to be built-out by 2023 and will generate a total of 1,432 new daily trips. Of these daily volumes, 129 new trips (99 entering and 30 exiting) are expected to occur during the AM peak hour and 132 new trips (37 entering and 95 exiting) are expected to occur during the PM peak hour.

Under Existing Conditions, all study intersections operate at acceptable Levels of Service (LOS) D or better except for the following intersections and approaches:

SR 42 at Bethlehem Road / Michaels Drive
The intersection operates at Levels of Service (LOS) E during the AM peak hour and LOS D during the PM peak hour. The eastbound approach operates at LOS F during the AM and PM peak hours. All other intersection approaches operate at LOS D or better during both peak hours.

SR 42 at Pine Grove Road / Site Driveway
The intersection and all its approaches operate at LOS D or better during the AM and PM peak hours, except for the westbound approach. The westbound approach operates at LOS E during the AM peak hour.

SR 42 at Market Place Boulevard
The intersection and all its approaches operate at LOS B or better during the AM and PM peak hours, except for the eastbound left turn lane approach. The eastbound left turn lane approach operates at LOS E during the AM and PM peak hours.

SR 42 at Bill Gardner Parkway
The signalized intersection currently operates at LOS F during the PM peak hour. The eastbound approach of the intersection currently operates at LOS E during the AM peak hour and LOS F during the PM peak hour. The northbound and southbound approaches operate at LOS D or better during both peak hours.

Bill Gardner Parkway at Market Place Boulevard
The signalized intersection and its approaches operate at LOS D or better during the AM peak hour, except for the southbound approach. The southbound approach currently operates at LOS E during the AM peak hour. Additionally, the signalized intersection and its approaches currently operate at LOS F during the PM peak hour.

In future conditions, one (1) traffic signal control installation is programmed to replace the existing unsignalized traffic controls at SR 42 and Market Place Boulevard. The programmed traffic signal improvement on SR 42 is included in the No-Build and Build Conditions Analysis for this DRI.

In No-Build Conditions, the increase in traffic from the applied growth rate causes the following conditional changes at each associated study intersection:

SR 42 at Bethlehem Road / Michaels Drive

The intersection changes to LOS F during the AM peak hour and maintains LOS D during the PM peak hour. The eastbound approach continues to operate at LOS F during the AM and PM peak hours. All other intersection approaches continue to operate at LOS D or better during both peak hours.

SR 42 at Pine Grove Road / Site Driveway

The intersection and all its approaches continue to operate at LOS D or better during the AM and PM peak hours, except for the westbound approach. The westbound approach maintains LOS E during the AM peak hour.

SR 42 at Market Place Boulevard

Analysis indicates that with the signalized intersection facility improvements in place, the intersection and all its approaches will operate at LOS B or better during the AM and PM peak hours.

SR 42 at Bill Gardner Parkway

The signalized intersection operates at a changed LOS E during the AM peak hour and maintains a LOS F during the PM peak hour. The eastbound approach of the intersection maintains LOS E during the AM peak hour and LOS F during the PM peak hour. The northbound approach changes to LOS E during the AM and PM peak hours, and the southbound approach continues to operate at LOS D or better during both peak hours.

Bill Gardner Parkway at Market Place Boulevard

The signalized intersection and its approaches continue to operate at LOS D or better during the AM peak hour, except for the southbound approach. The southbound maintains LOS E during the AM peak hour. Additionally, the signalized intersection and its approaches maintain their LOS F during the PM peak hour.

For Build Conditions, the addition of project traffic to the study intersections mentioned above causes the following conditional changes at each associated study intersection when compared to No-Build Conditions:

SR 42 at Bethlehem Road / Michaels Drive

The intersection changes LOS E during the PM peak hour. The eastbound approach continues to operate at LOS F during the AM and PM peak hours. All other intersection approaches continue to operate at LOS D or better during both peak hours.

SR 42 at Pine Grove Road / Site Driveway

The intersection and all its approaches continue to operate at LOS D or better during the AM and PM peak hours, except for the westbound approach. The westbound approach changes LOS F during the AM peak hour and LOS E during the PM peak hour. In the AM peak hour, only four (4) additional trips are added to this approach. In the PM peak hour, only two (2) additional trips are added to this approach. Additionally, the eastbound left turn lane at the site driveway operates at LOS F during both the AM and PM peak hours. However, the overall eastbound approach operates at LOS C during the AM peak hour and LOS D in the PM peak hour.

SR 42 at Market Place Boulevard

Analysis indicates that the signalized intersection and all its approaches continue operating at LOS B or better during the AM and PM peak hours.

SR 42 at Bill Gardner Parkway

Analysis indicates that with the optimized cycle length splits at the signalized intersection, the overall intersection maintains a LOS E during the AM peak hour and LOS F during the PM peak hour. The eastbound approach of the intersection changes to LOS F during the AM peak hour and maintains LOS F during the PM peak hour. However, the northbound and southbound approaches are anticipated to operate at LOS D or better during the AM and PM peak hours with the optimized cycle length splits applied.

Bill Gardner Parkway at Market Place Boulevard

Analysis indicates that with the optimized cycle length splits at the signalized intersection, the overall intersection maintains LOS D during the AM peak hour. However, the southbound approach changes to LOS F during the AM peak hour. Additionally, the signalized intersection and its approaches maintain their LOS F during the PM peak hour.

Queueing analysis suggests that the existing roadway facilities in the study may become overloaded under future traffic conditions. The additional traffic expected to be generated by the proposed site is also expected to contribute to the delays and queues at each intersection. However, the impact of site traffic at the study intersections is negligible in future conditions.

From the conducted analysis, the following additional mitigations will be needed at the following study intersections to operate at the acceptable GRTA LOS thresholds in future years:

SR 42 at Bethlehem Road / Michaels Drive

- Signalized traffic control with no lane geometry improvements

SR 42 at Bill Gardner Parkway

- Install a dual eastbound right turn lane on Bill Gardner Parkway with one (1) additional receiving lane on SR 42.

Bill Gardner Parkway at Market Place Boulevard

- Install dual northbound left turn lanes on Market Place Boulevard.
- Convert existing shared left/through/right lane to dedicated through lane and dedicated right turn lane on Market Place Boulevard.
- Install dual southbound right turn lanes on Market Place Boulevard
- Maintain existing southbound through and dedicated left turn lanes on Market Place Boulevard.
- Maintain Split Phasing on northbound and southbound approaches.
- Widen Bill Gardner Parkway from four-lanes to six-lanes

The signalized control mitigation on SR 42 at Bethlehem Road/Michaels Drive was evaluated using the Manual on Uniform Traffic Control Devices (MUTCD) Signal Warrant 2 thresholds.

These additional mitigations in the study network are based on the capacity analysis results identified for movements failing with LOS E or worse between existing and future years with the following future conditions already incorporated in the future scenarios evaluated:

- The programmed signal improvement at SR 42 and Market Place Boulevard
- The Build Condition signal optimization modifications incorporated in the study network

Future consideration should also be made by the local jurisdiction to install a new interstate access ramp in the area to reduce existing and future traffic congestion observed at the SR 42 at Bill Gardner Parkway and Bill Gardner Parkway at Market Place Boulevard intersections.

APPENDIX

APPENDIX A

SITE PLAN

SITE DATA

Total Acreage:	113.16 AC
Building Coverage:	18%
Impervious Estimate:	39%
Open Area:	39%
Density:	7,796 SF/Acre

Parcels: 111-01014000, 111-01008000, 111-01009000, Portions of 111-01007000

Landlots: 233, 234

Current Zoning: Residential-Agricultural (RA)

Proposed Zoning: Light Industrial (M-1)

Current FLUM Designation: Industrial and Parks, Recreation, Consv.

Proposed FLUM Designation: Industrial and Parks, Recreation, Consv.

Total Building Area:	882,200 SF
Total Car Parking:	612 Spaces
Includes ADA Handicap Spaces	
Code Required Parking:	186 Spaces
Total Trailer Parking:	316 Spaces
Includes 88 Stacked Spaces	
Water Demand:	15,300 GPD
Sewer Demand:	15,300 GPD

This project is located within the Indian Creek Watershed District limited development area, but falls outside of the Water Quality Critical Area.

CIVIL ENGINEER

WILLIAM GREER, P.E.
EBERLY & ASSOCIATES, INC.
2951 FLOWERS ROAD SOUTH, SUITE 119
ATLANTA, GEORGIA 30341
(770) 452-7849
WGREER@EBERLY.NET

TRAFFIC ENGINEER

GEORGE DOYLE
NV5
1255 CANTON STREET, SUITE G
ROSWELL, GEORGIA 30075
(678) 795-3615
GEORGE.DOYLE@NV5.COM

DEVELOPER

BLAKE ROELL
SANSONE
120 SOUTH CENTRAL, SUITE 500
St. LOUIS, MO 63105
(314) 727-6664 ext 386
BROELL@SANSONEGROUP.COM

E&A# 21-098
DRI# 3506

LOCATION MAP
N.T.S.
GPS LOCATION OF SITE: 33.631389° N, 83.965556° W

GRAPHIC SCALE

-500 0 250 500 1000 2000

(IN FEET)
1 INCH = 500 FT.

DRI# 3506 SANSONE

SR42 LOCUST GROVE

SR42 AND PINE GROVE RD
JANUARY 10, 2022

NORTH

REVISIONS:	
9/14/2021	INITIAL SITE PLAN
1/10/2022	REVISED SITE BOUNDARY
3/28/2022	DRI COMMENTS

TEL770.452.7849
2951 FLOWERS ROAD SOUTH, SUITE 119
ATLANTA, GEORGIA 30341
WWW.EBERLY.NET

LAND PLANNING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE

EBERLY & ASSOCIATES

SITE DATA

Total Acreage:	113.16 AC
Building Coverage:	18%
Impervious Estimate:	39%
Open Area:	39%
Density:	7,796 SF/Acre

Parcels: 111-01014000, 111-01008000, 111-01009000, Portions of 111-01007000

Landlots: 233, 234

Current Zoning: Residential-Agricultural (RA)

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Sewer Demand:	15,300 GPD

This project is located within the Indian Creek Watershed District limited development area, but falls outside of the Water Quality Critical Area.

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St. LOUIS, MO 63105
(314) 727-6664 ext 386
BROELL@SANSONEGROUP.COM

E&A# 21-098
DRI# 3506

City of Locust Grove MS4 System
- LG Parcels 2018
- Railroad

Streets
- <all other values>

TYPE
- CNTRP
- CNTRUP
- CTYSP
- CTYSUP
- INTSTHWY
- INTSTHWYAC
- PD
- PPDRD
- STHWY
- UNCST
- <all other values>

FLU0606
- Gateway Town Center
- Central Business District
- Mixed Historic Neighborhood
- Mixed Use Neighborhood
- Mixed Use District
- Office
- Professional/Institutional
- Rural Residential
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Very High Density - County
- Neighborhood Commercial
- Community Commercial
- Regional Commercial
- Commercial - County
- Service Commercial
- Industrial
- Trans., Comm., Utilities
- Parks, Recreation, Consv.
- LG_Limits_2016

GRAPHIC SCALE

-500 0 250 500 1000 2000

(IN FEET)
1 INCH = 500 FT.

DRI# 3506 SANSONE
SR42 LOCUST GROVE
SR42 AND PINE GROVE RD
JANUARY 10, 2022

NORTH

REVISIONS:	
9/14/2021	INITIAL SITE PLAN
1/10/2022	REVISED SITE BOUNDARY
3/28/2022	DRI COMMENTS

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LAND PLANNING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE

E&A EBERLY & ASSOCIATES

G:\PROJECTS\2021\21-098 Sansone Locust Grove\5.0 Drawings\5.6 Old\30x42 Base_Rezoning and DRI.dwg March 28, 2022 - 11:08am wgreer

APPENDIX B

PROGRAMMED & PLANNED PROJECT REPORTS

HE-201

Atlanta Region's Plan RTP (2020) PROJECT FACT SHEET

Short Title	SR 42 BRIDGE REPLACEMENT AT NORFOLK SOUTHERN LINE 5 MILES SOUTH OF MCDONOUGH
GDOT Project No.	0013995
Federal ID No.	N/A
Status	Programmed
Service Type	Roadway / Bridge Upgrade
Sponsor	GDOT
Jurisdiction	Henry County
Analysis Level	Exempt from Air Quality Analysis (40 CFR 93)

Existing Thru Lane	2	**LCI**		**Network Year**	TBD
Planned Thru Lane	2	**Flex**		**Corridor Length**	0.4 miles

Detailed Description and Justification

This project will replace the bridge at SR 42 at the Norfolk Southern rail line 5 miles south of McDonough.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
PE	Surface Transportation Block Grant (STBG) Program Flex (GDOT)	AUTH	2017	**$600,000**	~~$480,000~~	~~$120,000~~	~~$0,000~~	~~$0,000~~
ROW	Surface Transportation Block Grant (STBG) Program Flex (GDOT)	AUTH	2021	**$1,760,000**	~~$1,408,000~~	~~$352,000~~	~~$0,000~~	~~$0,000~~
UTL	Surface Transportation Block Grant (STBG) Program Flex (GDOT)		2024	**$195,974**	$156,779	$39,195	$0,000	$0,000
CST	Surface Transportation Block Grant (STBG) Program Flex (GDOT)		2024	**$4,613,071**	$3,690,457	$922,614	$0,000	$0,000
				$7,169,045	**$5,735,236**	**$1,433,809**	**$0,000**	**$0,000**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases

? For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

Report Generated: 8/25/2021

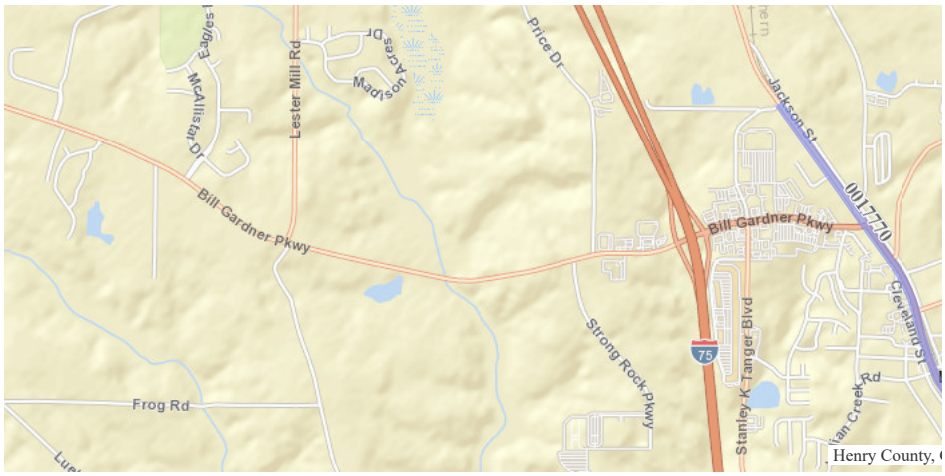
SR 42 FROM MLK JR BLVD TO MARKETPLACE BLVD - SCOPING ONLY

Project ID:	**0017770**	Notice to Proceed Date:	
Project Manager:	Darrius Lee	Construction Percent Complete:	%
Office:	Program Delivery	Current Completion Date:	
County:	Henry	Work Completion Date:	
Congressional District:	003	Construction Contract Amount:	
State Senate District.:	017	Construction Contractor:	
State House District:	111, 130	**Preconstruction Status Report**	
Project Type:	Other	**Construction Status Report**	
Project Status:	Construction Work Program		
Right of Way Authorization:		Contact Us	

Project Description:

Bridge Replacement of Robertson Bridge Road at Barber Creek. This bridge is deficient and requires posting due to the beams having defects from previous use and the structure is a one-lane structure.

Activity	Program Year	Cost Estimate	Date of Last Estimate
SCP (Scoping)	2021	$900,000.00	



Project Documents
There are no items to show in this view.

One Georgia Center
600 West Peachtree NW
Atlanta, GA 30308
(404) 631-1990 Main Office
Contact Us

HE-202

Atlanta Region's Plan RTP (2020) PROJECT FACT SHEET

Short Title	SR 42 / US 23 WIDENING FROM BILL GARDNER PARKWAY TO PEEKSVILLE ROAD
GDOT Project No.	0015823
Federal ID No.	N/A
Status	Programmed
Service Type	Roadway / General Purpose Capacity
Sponsor	GDOT
Jurisdiction	Henry County
Analysis Level	In the Region's Air Quality Conformity Analysis

Existing Thru Lane	2	**LCI**		**Network Year**	2030
Planned Thru Lane	3	**Flex**		**Corridor Length**	0.4 miles

Detailed Description and Justification

This project is a reconstruction widening project. This project starting point begins at SR 42 going towards CS 636/BILL GARDNER PKWY and ending at CS 645/PEEKSVILLE RD. This project is 0.40 mile in length, located in the Congressional 3 District. An add lane in the southbound direction in the City of Locust Grove to release the congested corridors, high volume intersections, decrease the frequencies of crashed and overall traffic delays.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
PE	Transportation Funding Act (HB 170)	AUTH	2018	**$200,000**	~~$0,000~~	~~$200,000~~	~~$0,000~~	~~$0,000~~
PE	Transportation Funding Act (HB 170)	AUTH	2021	**$65,000**	~~$0,000~~	~~$65,000~~	~~$0,000~~	~~$0,000~~
ROW	Transportation Funding Act (HB 170)	AUTH	2020	**$1,360,000**	~~$0,000~~	~~$1,360,000~~	~~$0,000~~	~~$0,000~~
UTL	Local Jurisdiction/Municipality Funds		2023	**$163,025**	$0,000	$0,000	$0,000	$163,025
UTL	Transportation Funding Act (HB 170)		2023	**$250,000**	$0,000	$250,000	$0,000	$0,000
CST	Local Jurisdiction/Municipality Funds		2023	**$21,234**	$0,000	$0,000	$0,000	$21,234
CST	Transportation Funding Act (HB 170)		2023	**$1,200,000**	$0,000	$1,200,000	$0,000	$0,000
				$3,259,259	**$0,000**	**$3,075,000**	**$0,000**	**$184,259**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases

? For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

Report Generated: 8/25/2021

SR 42 FROM CS 636/BILL GARDNER PKWY TO CS 645/PEEKSVILLE RD

Project ID:	**0015823**	Notice to Proceed Date:	
Project Manager:	Antoniette K Moseley	Construction Percent Complete:	%
Office:	Program Delivery	Current Completion Date:	
County:	Henry	Work Completion Date:	
Congressional District:	003	Construction Contract Amount:	
State Senate District.:	017	Construction Contractor:	
State House District:	130	**Preconstruction Status Report**	
Project Type:	Reconstruction/Rehabilitation	**Construction Status Report**	
Project Status:	Construction Work Program		
Right of Way Authorization:	3/3/2020	Contact Us	

Project Description:

This project is a reconstruction widening project. This project starting point begins at SR 42 going towards CS 636/BILL GARDNER PKWY and ending at CS 645/PEEKSVILLE RD. This project is 0.40 mile in length, located in the Congressional 3 District. An add lane in the southbound direction in the City of Locust Grove to release the congested corridors, high volume intersections, decrease the frequencies of crashed and overall traffic delays.

Activity	Program Year	Cost Estimate	Date of Last Estimate
PE (Preliminary Engineering)	2018	$200,000.00	1/19/2021
ROW (Right of Way)	2020	$1,360,000.00	5/15/2019
PE (Preliminary Engineering)	2021	$65,000.00	1/19/2021
UTL (Utilities)	2023	$229,983.81	7/1/2021
CST (Construction)	2023	$1,259,292.34	6/17/2021

Project Documents
Approved Concept Reports
0015823_CR_MAR2019.pdf
0015823_L&D_Affidavit_JUN2020.pdf
0015823_L&D_MAY2020.pdf
Project Outreach Archive
0015823_PIOH TYPICAL SECTIONS.pdf
0015823_NEPA_PIOH_handout.pdf
0015823_PIOH LAYOUT.pdf

GDOT
Georgia Department of Transportation

Most Visited

Road & Traffic Data
Contractors
Design Guides
Crash Reporting
Disadvantaged Business Enterprise (DBE)

Georgia Department of Transportation
One Georgia Center
600 West Peachtree NW
Atlanta, GA 30308
(404) 631-1990 Main Office
Contact Us

HE-126A1

Atlanta Region's Plan RTP (2020) PROJECT FACT SHEET

Short Title	HAMPTON LOCUST GROVE ROAD WIDENING FROM SR 20 (MCDONOUGH ROAD) TO SR 155
GDOT Project No.	N/A
Federal ID No.	
Status	Long Range
Service Type	Roadway / General Purpose Capacity
Sponsor	Henry County
Jurisdiction	Henry County
Analysis Level	In the Region's Air Quality Conformity Analysis

Existing Thru Lane	2	**LCI**		**Network Year**	2040
Planned Thru Lane	4	**Flex**		**Corridor Length**	5.8 miles

Detailed Description and Justification

This portion of Hampton/Locust Grove Road consists of narrow pavement. This project will provide widening from 2 to 4 lanes between SR20 and SR155. This is likely the second phase of the project with the first phase being HE-126B.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
ALL	Local Jurisdiction/Municipality Funds		LR 2031-2040	**$18,000,000**	$0,000	$0,000	$0,000	$18,000,000
				$18,000,000	**$0,000**	**$0,000**	**$0,000**	**$18,000,000**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases

? For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

Report Generated: 8/25/2021

HE-126B

Atlanta Region's Plan RTP (2020) PROJECT FACT SHEET

Short Title	BILL GARDNER PARKWAY WIDENING AT SR 155 TO LESTER MILL ROAD (4 LANES) AND FROM LESTER MILL ROAD TO I-75 SOUTH (6 LANES)
GDOT Project No.	0000562
Federal ID No.	N/A
Status	Long Range
Service Type	Roadway / General Purpose Capacity
Sponsor	Henry County
Jurisdiction	Henry County
Analysis Level	In the Region's Air Quality Conformity Analysis

Existing Thru Lane	2	**LCI**		**Network Year**	2030
Planned Thru Lane	4/6	**Flex**		**Corridor Length**	3.4 miles

Detailed Description and Justification

Widening of the section from SR 155 to Lester Mill Road from 2 to 4 lanes and the section from Lester Mill Road to I-75 South from 2 to 6 lanes.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
ALL	General Federal Aid - 2026-2050		LR 2026-2030	**$18,000,000**	$14,400,000	$0,000	$0,000	$3,600,000
				$18,000,000	**$14,400,000**	**$0,000**	**$0,000**	**$3,600,000**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases

? For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

Report Generated: 8/25/2021

HE-189

Atlanta Region's Plan RTP (2020) PROJECT FACT SHEET

Short Title	SR 155 (MCDONOUGH ROAD) WIDENING FROM I-75 SOUTH TO HAMPTON-LOCUST GROVE ROAD/BILL GARDNER PARKWAY
GDOT Project No.	0015284
Federal ID No.	N/A
Status	Programmed
Service Type	Roadway / General Purpose Capacity
Sponsor	GDOT
Jurisdiction	Henry County
Analysis Level	In the Region's Air Quality Conformity Analysis

Existing Thru Lane	2	**LCI**		**Network Year**	2040
Planned Thru Lane	4	**Flex**		**Corridor Length**	3.6 miles

Detailed Description and Justification

This project will widen SR 155 to 4 lanes from I-75 to Hampton-Locust Grove Road & Bill Gardner Parkway.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
ALL	Transportation Funding Act (HB 170)		LR 2026-2030	**$70,069,000**	$0,000	$70,069,000	$0,000	$0,000
				$70,069,000	**$0,000**	**$70,069,000**	**$0,000**	**$0,000**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases

? For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

Report Generated: 8/25/2021

HE-209

Atlanta Region's Plan RTP (2020) PROJECT FACT SHEET

Short Title	BETHLEHEM ROAD EXTENSION AND REALIGNMENT FROM LESTER MILL ROAD TO INTERSECTION OF IRIS LAKE ROAD AND HARRIS DRIVE
GDOT Project No.	N/A
Federal ID No.	N/A
Status	Long Range
Service Type	Roadway / General Purpose Capacity
Sponsor	City of Locust Grove
Jurisdiction	Henry County
Analysis Level	In the Region's Air Quality Conformity Analysis

Existing Thru Lane	0/2	**LCI**		**Network Year**	2040
Planned Thru Lane	2	**Flex**		**Corridor Length**	2.4 miles

Detailed Description and Justification

This project will extend Bethlehem Road northwards to the intersection of Iris Lake Road and Harris Drive.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
ALL	Local Jurisdiction/Municipality Funds		LR 2031-2040	**$16,000,000**	$0,000	$0,000	$0,000	$16,000,000
				$16,000,000	**$0,000**	**$0,000**	**$0,000**	**$16,000,000**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases

? For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

Report Generated: 8/25/2021

HE-210

Atlanta Region's Plan RTP (2020) PROJECT FACT SHEET

Short Title	L.G. GRIFFIN ROAD WIDENING FROM HOSANNAH ROAD TO SR 42/US 23
GDOT Project No.	N/A
Federal ID No.	N/A
Status	Long Range
Service Type	Roadway / General Purpose Capacity
Sponsor	City of Locust Grove
Jurisdiction	Henry County
Analysis Level	In the Region's Air Quality Conformity Analysis

Existing Thru Lane	2	**LCI**		**Network Year**	2050
Planned Thru Lane	4	**Flex**		**Corridor Length**	2.1 miles

Detailed Description and Justification

This project will widen L.G. Griffin Road to 4 lanes from Hosannah Road to SR 42/US 23.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
ALL	Local Jurisdiction/Municipality Funds		LR 2041-2050	**$17,000,000**	$0,000	$0,000	$0,000	$17,000,000
				$17,000,000	**$0,000**	**$0,000**	**$0,000**	**$17,000,000**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases

? For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

Report Generated: 8/25/2021

HE-211

Atlanta Region's Plan RTP (2020) PROJECT FACT SHEET

Short Title	TANGER BOULEVARD NEW ALIGNMENT AND FLYOVER BRIDGE FROM STRONG ROCK PARKWAY TO TANGER BOULEVARD
GDOT Project No.	N/A
Federal ID No.	N/A
Status	Long Range
Service Type	Roadway / General Purpose Capacity
Sponsor	City of Locust Grove
Jurisdiction	Henry County
Analysis Level	In the Region's Air Quality Conformity Analysis

Existing Thru Lane	0	**LCI**		**Network Year**	2050
Planned Thru Lane	2	**Flex**		**Corridor Length**	0.5 miles

Detailed Description and Justification

This project will extend Tanger Boulevard westward across I-75 to the intersection of Strong Rock Parkway.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
ALL	Local Jurisdiction/Municipality Funds		LR 2041-2050	**$7,000,000**	$0,000	$0,000	$0,000	$7,000,000
				$7,000,000	**$0,000**	**$0,000**	**$0,000**	**$7,000,000**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases

? For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

Report Generated: 8/25/2021

AR-318

Atlanta Region's Plan RTP (2020) PROJECT FACT SHEET

Short Title	I-75 COMMERCIAL VEHICLE LANES (NORTHBOUND DIRECTION ONLY) FROM I-475 TO SR 155
GDOT Project No.	0014203
Federal ID No.	N/A
Status	Programmed
Service Type	Roadway / Managed Lanes
Sponsor	GDOT
Jurisdiction	Henry County,Spalding County
Analysis Level	In the Region's Air Quality Conformity Analysis

Existing Thru Lane	0	**LCI**		**Network Year**	2030
Planned Thru Lane	2	**Flex**		**Corridor Length**	38.6 miles

Detailed Description and Justification

The I-75 Commercial Vehicle Lanes project will improve safety, travel time reliability, and mobility for freight operators and passenger vehicles. The project involves the construction of two, barrier-separated, northbound truck-only lanes beginning at the I-75/I-475 Interchange in Monroe County along the I-75 corridor for approximately 41 miles, ending near the SR 20 Interchange in Henry County. The project will benefit all motorists by improving safety and travel-time reliability, while also improving freight mobility to help maintain the state's competitiveness and economic growth.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
PE	Transportation Funding Act (HB 170)	AUTH	2017	**$977,865**	~~$0,000~~	~~$977,865~~	~~$0,000~~	~~$0,000~~
PE	National Highway Performance Program (NHPP)	AUTH	2018	**$924,000**	~~$739,200~~	~~$184,800~~	~~$0,000~~	~~$0,000~~
PE	National Highway System	AUTH	2018	**$87,503**	~~$70,002~~	~~$17,501~~	~~$0,000~~	~~$0,000~~
PE	Repurposed Earmark	AUTH	2018	**$1,056,249**	~~$844,999~~	~~$211,250~~	~~$0,000~~	~~$0,000~~
PE	National Highway Performance Program (NHPP)	AUTH	2019	**$1,287,541**	~~$1,030,033~~	~~$257,508~~	~~$0,000~~	~~$0,000~~
PE	Repurposed Earmark (RPF9)	AUTH	2019	**$142,459**	~~$113,967~~	~~$28,492~~	~~$0,000~~	~~$0,000~~
PE	National Highway Performance Program (NHPP)	AUTH	2020	**$1,540,000**	~~$1,232,000~~	~~$308,000~~	~~$0,000~~	~~$0,000~~
PE	National Highway Performance Program (NHPP)	AUTH	2021	**$8,000,000**	~~$6,400,000~~	~~$1,600,000~~	~~$0,000~~	~~$0,000~~
PE	National Highway Performance Program (NHPP)		2022	**$1,628,000**	$1,302,400	$325,600	$0,000	$0,000
PE	National Highway Performance Program (NHPP)		2023	**$1,210,000**	$968,000	$242,000	$0,000	$0,000

? For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

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ROW	National Highway Performance Program (NHPP)	AUTH	2020	**$330,000**	~~$264,000~~	~~$66,000~~	~~$0,000~~	~~$0,000~~
ROW	National Highway Performance Program (NHPP)	AUTH	2021	**$3,100,000**	~~$2,480,000~~	~~$620,000~~	~~$0,000~~	~~$0,000~~
ROW	National Highway Performance Program (NHPP)		2022	**$1,100,000**	$880,000	$220,000	$0,000	$0,000
ROW	National Highway Performance Program (NHPP)		2023	**$1,100,000**	$880,000	$220,000	$0,000	$0,000
ROW	National Highway Performance Program (NHPP)		2024	**$4,840,000**	$3,872,000	$968,000	$0,000	$0,000
ROW	National Highway Performance Program (NHPP)		2025	**$4,840,000**	$3,872,000	$968,000	$0,000	$0,000
CST	National Highway Performance Program (NHPP)		2024	**$3,828,000**	$3,062,400	$765,600	$0,000	$0,000
CST	National Highway Performance Program (NHPP)		2025	**$4,422,000**	$3,537,600	$884,400	$0,000	$0,000
CST	Toll Revenue Bonds		2025	**$13,332,000**	$0,000	$0,000	$13,332,000	$0,000
CST	General Federal Aid - 2026-2050		LR 2026-2030	**$50,336,000**	$40,268,800	$10,067,200	$0,000	$0,000
CST	General Federal Aid - 2026-2050		LR 2031-2040	**$198,000,000**	$158,400,000	$39,600,000	$0,000	$0,000
CST	General Federal Aid - 2026-2050		LR 2041-2050	**$198,000,000**	$158,400,000	$39,600,000	$0,000	$0,000
CST	Design Build Finance (DBF) Repayment - Federal		LR 2051+	**$267,300,000**	$213,840,000	$53,460,000	$0,000	$0,000
				$767,381,617	**$602,457,401**	**$151,592,216**	**$13,332,000**	**$0,000**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases

AR-955

Atlanta Region's Plan RTP (2020) PROJECT FACT SHEET

Short Title	I-75 SOUTH - NEW INTERCHANGE AT BETHLEHEM ROAD
GDOT Project No.	N/A
Federal ID No.	N/A
Status	Long Range
Service Type	Roadway / Interchange Capacity
Sponsor	Henry County
Jurisdiction	Henry County
Analysis Level	In the Region's Air Quality Conformity Analysis

Existing Thru Lane	0	**LCI**		**Network Year**	2040
Planned Thru Lane	2	**Flex**		**Corridor Length**	N/A miles

Detailed Description and Justification

New I-75 interchange intended to relieve freight congestion along the SR 155 and SR 42 industrial/distribution corridors.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
ALL	General Federal Aid - 2026-2050		LR 2031-2040	**$25,000,000**	$20,000,000	$5,000,000	$0,000	$0,000
				$25,000,000	**$20,000,000**	**$5,000,000**	**$0,000**	**$0,000**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases

? For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

Report Generated: 8/25/2021

APPENDIX C

TRAFFIC COUNT DATA

TRAFFIC DATA SERVICES

Phone: (678) 687-8266 Fax: (404) 294-6122

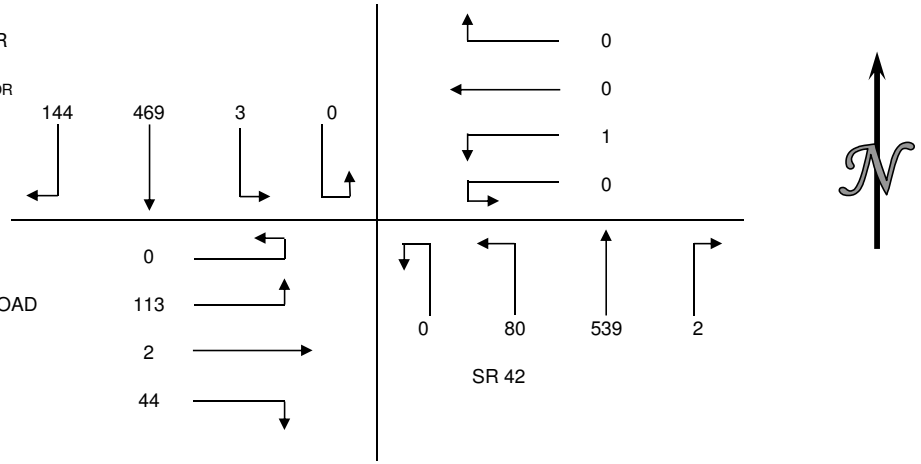
INTERSECTION TURNING MOVEMENT COUNT CARS SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 7:00 AM TO 9:00 AM
INTERSECTION: N/S SR 42/US 23
E/W BETHLEHEM ROAD

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
700-715	42	106	1	0	1	1	0	0	2	103	23	0	7	0	20	0	306
715-730	34	126	0	0	0	0	0	0	0	103	19	0	14	1	32	0	329
730-745	45	138	1	0	0	0	0	0	0	155	21	0	13	0	35	0	408
745-800	34	112	0	0	0	0	1	0	1	147	21	0	10	1	25	0	352
800-815	31	93	2	0	0	0	0	0	1	134	19	0	7	0	21	0	308
815-830	18	80	1	0	0	1	1	0	0	106	7	0	7	0	14	0	235
830-845	13	119	0	0	0	2	1	0	0	94	6	0	7	0	20	0	262
845-900	15	37	0	0	0	0	0	0	1	81	10	0	9	0	9	0	162
HOUR TOTALS																	
700-800	155	482	2	0	1	1	1	0	3	508	84	0	44	2	112	0	1395
715-815	144	469	3	0	0	0	1	0	2	539	80	0	44	2	113	0	1397
730-830	128	423	4	0	0	1	2	0	2	542	68	0	37	1	95	0	1303
745-845	96	404	3	0	0	3	3	0	2	481	53	0	31	1	80	0	1157
800-900	77	329	3	0	0	3	2	0	2	415	42	0	30	0	64	0	967

AM PEAK HOUR
715-815
PEAK HOUR FACTOR
0.86



TRAFFIC DATA SERVICES

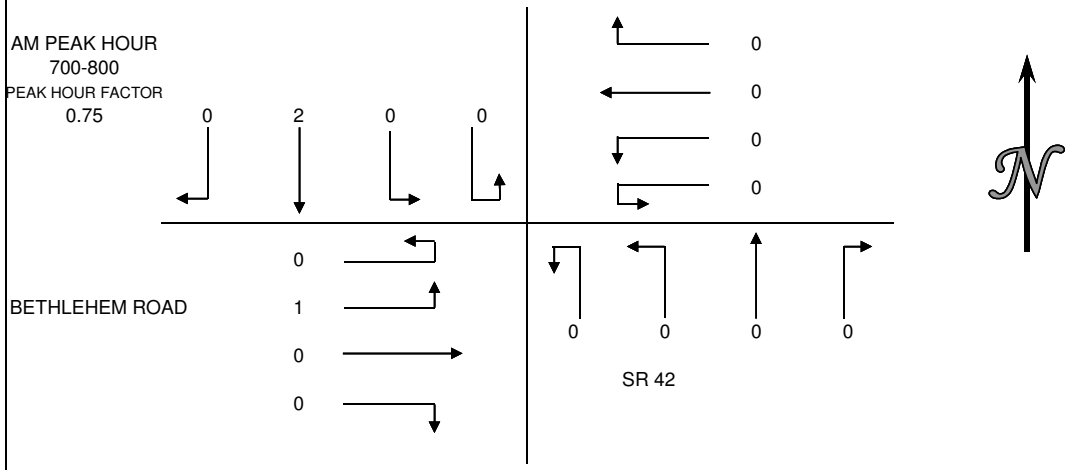
Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT SINGLE UNIT TRUCKS & BUSES SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 7:00 AM TO 9:00 AM
INTERSECTION: N/S SR 42/US 23
E/W BETHLEHEM ROAD

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
700-715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
715-730	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
730-745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
745-800	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
800-815	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
815-830	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
830-845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
845-900	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
HOUR TOTALS																	
700-800	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3
715-815	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
730-830	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
745-845	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
800-900	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3



TRAFFIC DATA SERVICES

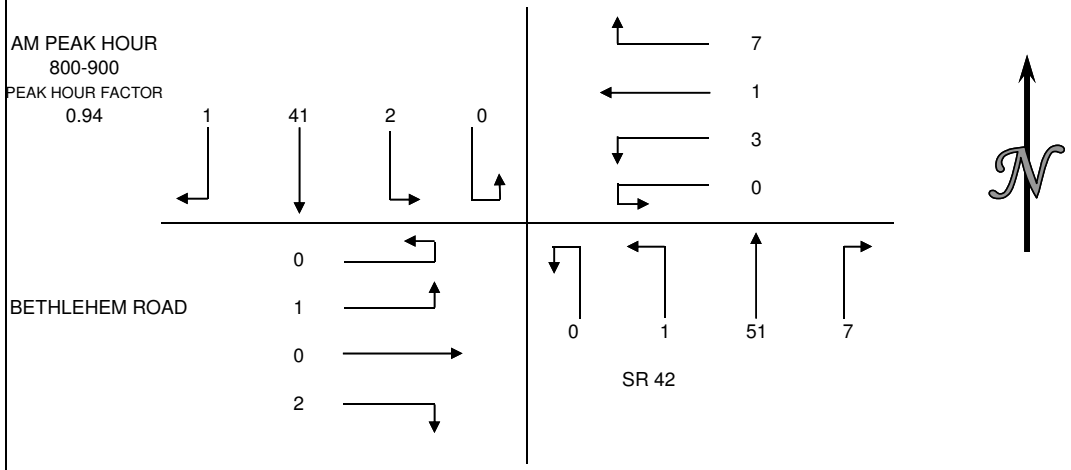
Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT HEAVY DUTY TRUCKS SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 7:00 AM TO 9:00 AM
INTERSECTION: N/S SR 42/US 23
E/W BETHLEHEM ROAD

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
700-715	0	2	0	0	3	0	0	0	1	2	1	0	0	0	0	0	9
715-730	0	12	1	0	1	0	0	0	2	5	0	0	0	0	1	0	22
730-745	1	4	0	0	3	1	1	0	4	11	1	0	0	0	1	0	27
745-800	0	10	0	0	2	0	0	0	1	12	0	0	0	0	0	0	25
800-815	1	10	1	0	3	0	1	0	2	8	0	0	0	0	1	0	27
815-830	0	11	1	0	1	0	1	0	1	13	1	0	2	0	0	0	31
830-845	0	12	0	0	3	1	1	0	2	10	0	0	0	0	0	0	29
845-900	0	8	0	0	0	0	0	0	2	20	0	0	0	0	0	0	30
HOUR TOTALS																	
700-800	1	28	1	0	9	1	1	0	8	30	2	0	0	0	2	0	83
715-815	2	36	2	0	9	1	2	0	9	36	1	0	0	0	3	0	101
730-830	2	35	2	0	9	1	3	0	8	44	2	0	2	0	2	0	110
745-845	1	43	2	0	9	1	3	0	6	43	1	0	2	0	1	0	112
800-900	1	41	2	0	7	1	3	0	7	51	1	0	2	0	1	0	117



TRAFFIC DATA SERVICES

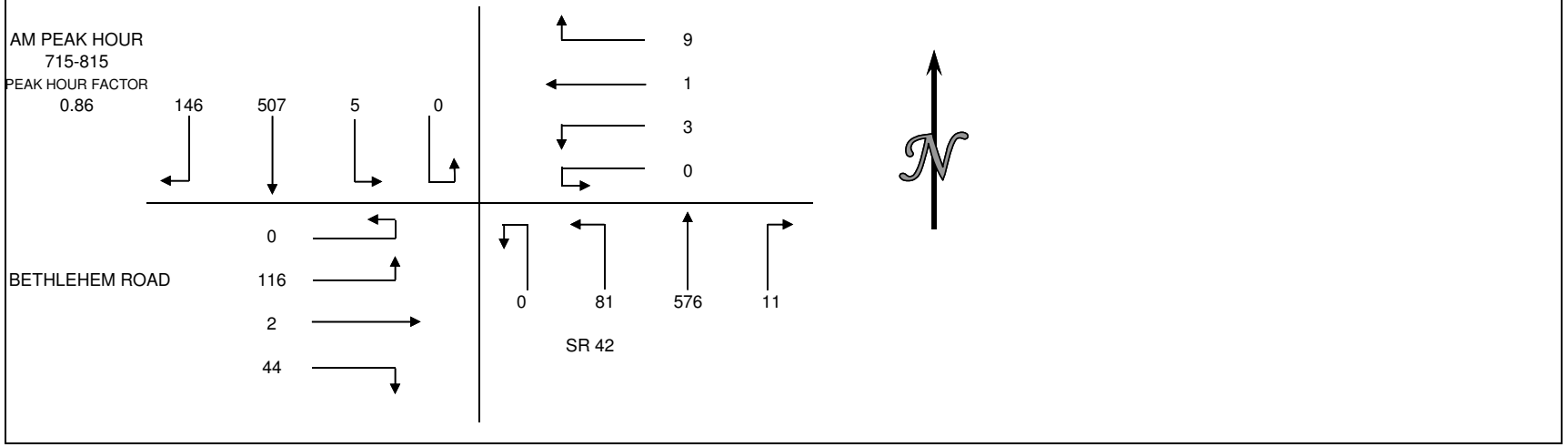
Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT ALL VEHICLES SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 7:00 AM TO 9:00 AM
INTERSECTION: N/S SR 42/US 23
E/W BETHLEHEM ROAD

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
700-715	42	108	1	0	4	1	0	0	3	105	24	0	7	0	21	0	316
715-730	34	139	1	0	1	0	0	0	2	108	19	0	14	1	33	0	352
730-745	46	142	1	0	3	1	1	0	4	166	22	0	13	0	36	0	435
745-800	34	123	0	0	2	0	1	0	2	159	21	0	10	1	25	0	378
800-815	32	103	3	0	3	0	1	0	3	143	19	0	7	0	22	0	336
815-830	18	92	2	0	1	1	2	0	1	119	8	0	9	0	14	0	267
830-845	13	131	0	0	3	3	2	0	2	104	6	0	7	0	20	0	291
845-900	15	46	0	0	0	0	0	0	3	101	10	0	9	0	9	0	193
HOUR TOTALS																	
700-800	156	512	3	0	10	2	2	0	11	538	86	0	44	2	115	0	1481
715-815	146	507	5	0	9	1	3	0	11	576	81	0	44	2	116	0	1501
730-830	130	460	6	0	9	2	5	0	10	587	70	0	39	1	97	0	1416
745-845	97	449	5	0	9	4	6	0	8	525	54	0	33	1	81	0	1272
800-900	78	372	5	0	7	4	5	0	9	467	43	0	32	0	65	0	1087



TRAFFIC DATA SERVICES

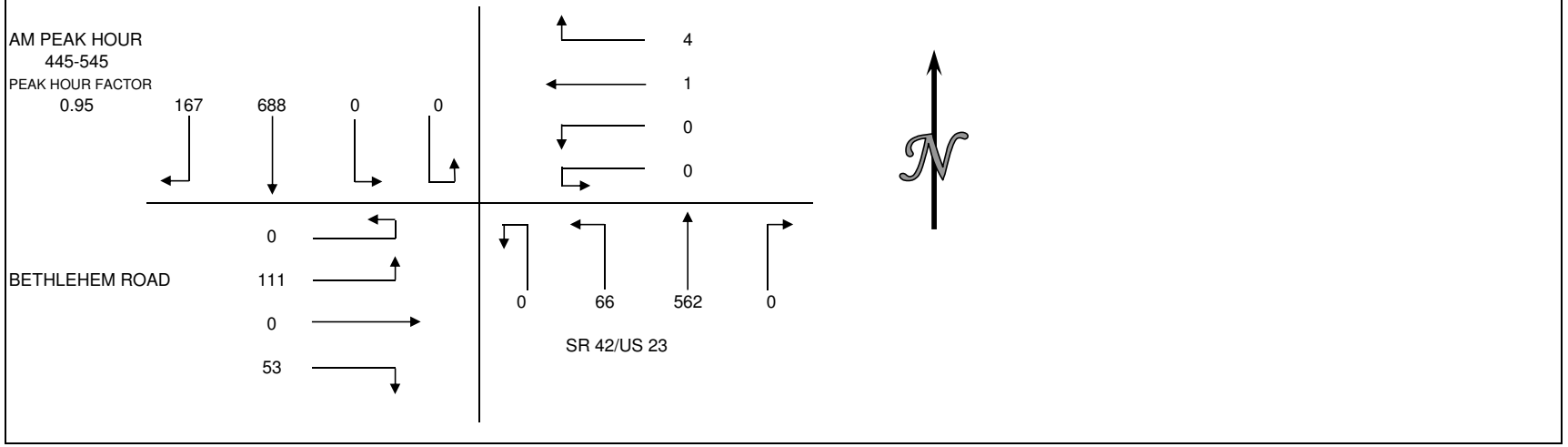
Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT CARS SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 4:00 PM TO 6:00 PM
INTERSECTION: N/S SR 42/US 23
E/W BETHLEHEM ROAD

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
400-415	46	158	0	0	1	0	0	0	0	135	9	0	5	0	31	0	385
415-430	31	162	0	0	1	0	0	0	0	109	14	0	11	3	21	0	352
430-445	41	168	0	0	0	1	0	0	0	130	12	0	8	0	26	0	386
445-500	33	180	0	0	1	1	0	0	0	141	14	0	17	0	25	0	412
500-515	41	153	0	0	1	0	0	0	0	154	19	0	9	0	29	0	406
515-530	48	186	0	0	0	0	0	0	0	140	14	0	17	0	28	0	433
530-545	45	169	0	0	2	0	0	0	0	127	19	0	10	0	29	0	401
545-600	26	188	0	0	0	0	0	0	0	118	15	0	17	0	32	0	396
HOUR TOTALS																	
400-500	151	668	0	0	3	2	0	0	0	515	49	0	41	3	103	0	1535
415-515	146	663	0	0	3	2	0	0	0	534	59	0	45	3	101	0	1556
430-530	163	687	0	0	2	2	0	0	0	565	59	0	51	0	108	0	1637
445-545	167	688	0	0	4	1	0	0	0	562	66	0	53	0	111	0	1652
500-600	160	696	0	0	3	0	0	0	0	539	67	0	53	0	118	0	1636



TRAFFIC DATA SERVICES

Phone: (678) 687-8266 Fax: (404) 294-6122

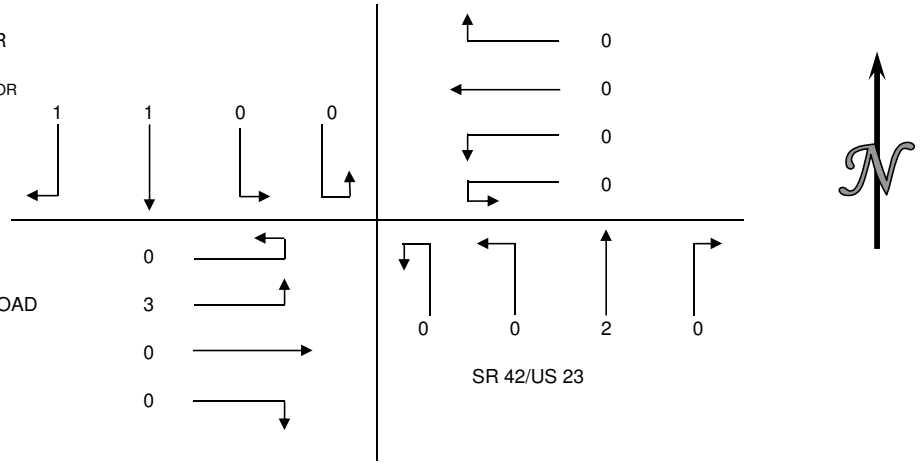
INTERSECTION TURNING MOVEMENT COUNT SINGLE UNIT TRUCKS & BUSES SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 4:00 PM TO 6:00 PM
INTERSECTION: N/S SR 42/US 23
E/W BETHLEHEM ROAD

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
400-415	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
415-430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
430-445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
445-500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
500-515	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
515-530	1	1	0	0	0	0	0	0	0	2	0	0	0	0	1	0	5
530-545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
545-600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HOUR TOTALS																	
400-500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
415-515	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
430-530	1	1	0	0	0	0	0	0	0	2	0	0	0	0	2	0	6
445-545	1	1	0	0	0	0	0	0	0	2	0	0	0	0	3	0	7
500-600	1	1	0	0	0	0	0	0	0	2	0	0	0	0	3	0	7

AM PEAK HOUR
445-545
PEAK HOUR FACTOR
0.35



TRAFFIC DATA SERVICES

Phone: (678) 687-8266 Fax: (404) 294-6122

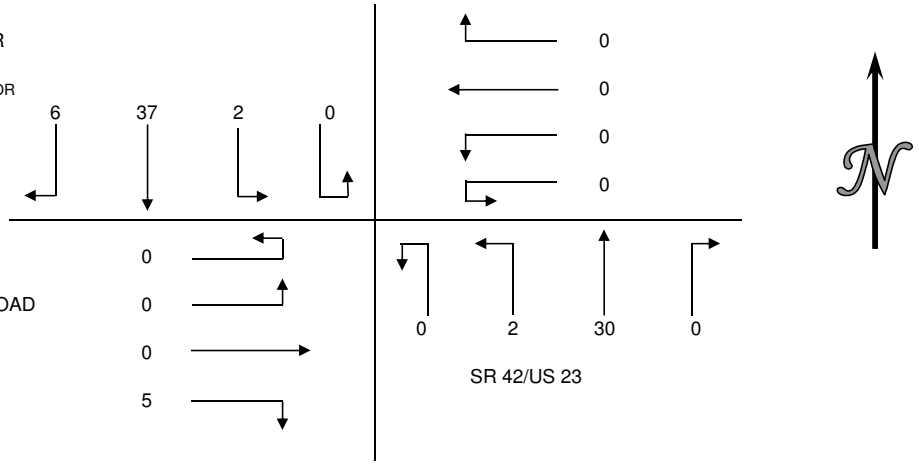
INTERSECTION TURNING MOVEMENT COUNT HEAVY DUTY TRUCKS SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 4:00 PM TO 6:00 PM
INTERSECTION: N/S SR 42/US 23
E/W BETHLEHEM ROAD

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
400-415	0	13	1	0	0	0	0	0	0	10	0	0	1	0	0	0	25
415-430	5	6	0	0	0	0	0	0	0	5	2	0	1	0	0	0	19
430-445	1	14	1	0	0	0	0	0	0	11	0	0	0	0	0	0	27
445-500	0	4	0	0	0	0	0	0	0	4	0	0	3	0	0	0	11
500-515	1	7	0	0	0	0	0	0	1	5	0	0	0	0	0	0	14
515-530	1	4	0	0	0	0	0	0	0	8	0	0	0	0	0	0	13
530-545	0	6	0	0	0	0	0	0	0	3	0	0	0	0	0	0	9
545-600	0	3	0	0	0	0	0	0	0	5	0	0	0	0	0	0	8
HOUR TOTALS																	
400-500	6	37	2	0	0	0	0	0	0	30	2	0	5	0	0	0	82
415-515	7	31	1	0	0	0	0	0	1	25	2	0	4	0	0	0	71
430-530	3	29	1	0	0	0	0	0	1	28	0	0	3	0	0	0	65
445-545	2	21	0	0	0	0	0	0	1	20	0	0	3	0	0	0	47
500-600	2	20	0	0	0	0	0	0	1	21	0	0	0	0	0	0	44

AM PEAK HOUR
400-500
PEAK HOUR FACTOR
0.76



TRAFFIC DATA SERVICES

Phone: (678) 687-8266 Fax: (404) 294-6122

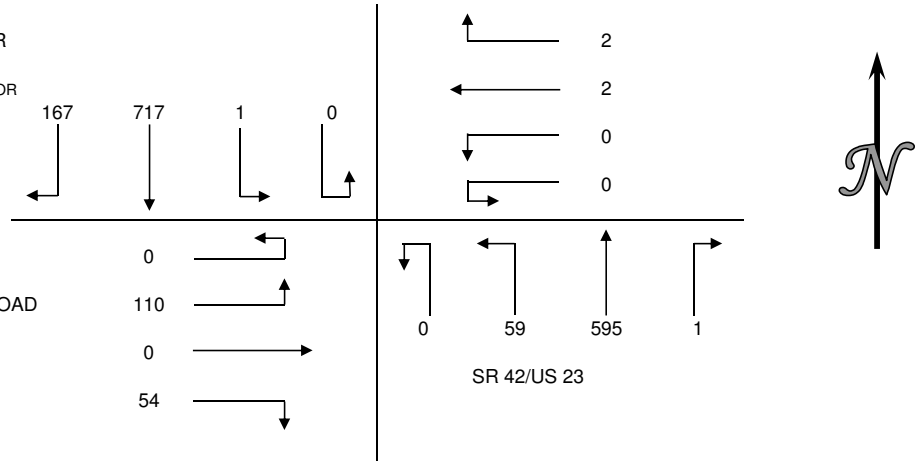
INTERSECTION TURNING MOVEMENT COUNT ALL VEHICLES SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 4:00 PM TO 6:00 PM
INTERSECTION: N/S SR 42/US 23
E/W BETHLEHEM ROAD

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
400-415	46	171	1	0	1	0	0	0	0	145	9	0	6	0	31	0	410
415-430	36	168	0	0	1	0	0	0	0	114	16	0	12	3	21	0	371
430-445	42	182	1	0	0	1	0	0	0	141	12	0	8	0	26	0	413
445-500	33	184	0	0	1	1	0	0	0	145	14	0	20	0	25	0	423
500-515	42	160	0	0	1	0	0	0	1	159	19	0	9	0	30	0	421
515-530	50	191	0	0	0	0	0	0	0	150	14	0	17	0	29	0	451
530-545	45	175	0	0	2	0	0	0	0	130	19	0	10	0	30	0	411
545-600	26	191	0	0	0	0	0	0	0	123	15	0	17	0	32	0	404
HOUR TOTALS																	
400-500	157	705	2	0	3	2	0	0	0	545	51	0	46	3	103	0	1617
415-515	153	694	1	0	3	2	0	0	1	559	61	0	49	3	102	0	1628
430-530	167	717	1	0	2	2	0	0	1	595	59	0	54	0	110	0	1708
445-545	170	710	0	0	4	1	0	0	1	584	66	0	56	0	114	0	1706
500-600	163	717	0	0	3	0	0	0	1	562	67	0	53	0	121	0	1687

AM PEAK HOUR
430-530
PEAK HOUR FACTOR
0.95



TRAFFIC DATA SERVICES

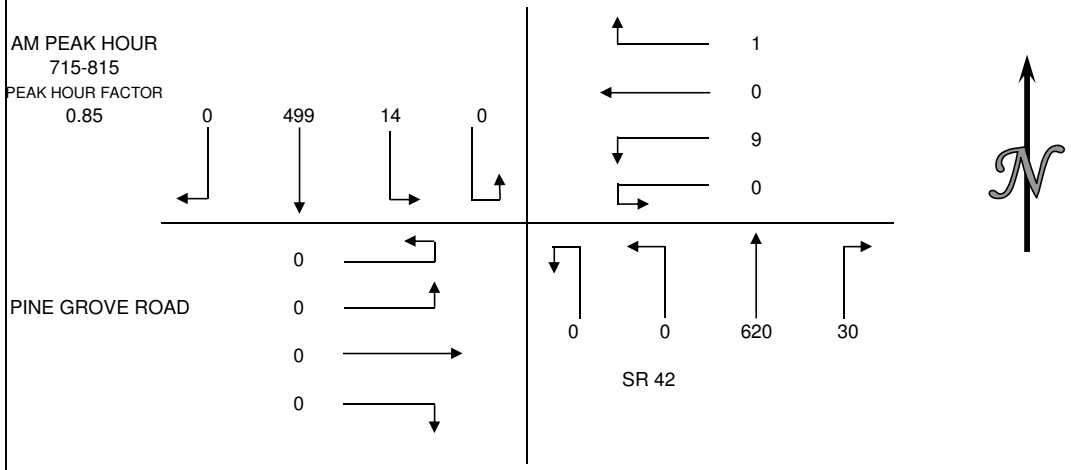
Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT CARS SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 7:00 AM TO 9:00 AM
INTERSECTION: N/S SR 42/US 23
E/W PINE GROVE ROAD

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
700-715	0	112	1	0	0	0	1	0	4	117	0	0	0	0	0	0	235
715-730	0	130	6	0	0	0	0	0	10	111	0	0	0	0	0	0	257
730-745	0	151	2	0	0	0	2	0	6	185	0	0	0	0	0	0	346
745-800	0	112	4	0	1	0	3	0	10	168	0	0	0	0	0	0	298
800-815	0	106	2	0	0	0	4	0	4	156	0	0	0	0	0	0	272
815-830	0	88	2	0	4	0	4	0	1	106	0	0	0	0	0	0	205
830-845	0	76	2	0	1	0	1	0	1	96	0	0	0	0	0	0	177
845-900	0	73	3	0	0	0	2	0	3	93	0	0	0	0	0	0	174
HOUR TOTALS																	
700-800	0	505	13	0	1	0	6	0	30	581	0	0	0	0	0	0	1136
715-815	0	499	14	0	1	0	9	0	30	620	0	0	0	0	0	0	1173
730-830	0	457	10	0	5	0	13	0	21	615	0	0	0	0	0	0	1121
745-845	0	382	10	0	6	0	12	0	16	526	0	0	0	0	0	0	952
800-900	0	343	9	0	5	0	11	0	9	451	0	0	0	0	0	0	828



TRAFFIC DATA SERVICES

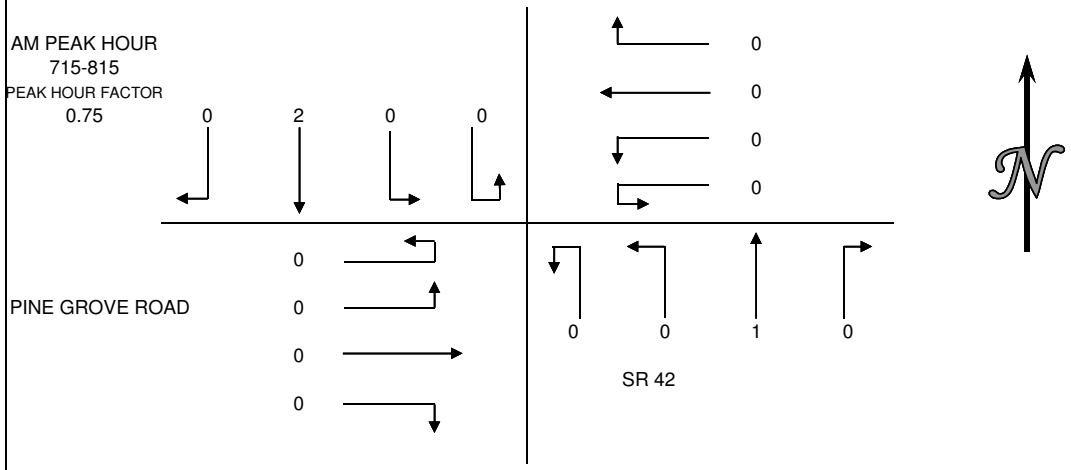
Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT SINGLE UNIT TRUCKS & BUSES SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 7:00 AM TO 9:00 AM
INTERSECTION: N/S SR 42/US 23
E/W PINE GROVE ROAD

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
700-715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
715-730	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
730-745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
745-800	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
800-815	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
815-830	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
830-845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
845-900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HOUR TOTALS																	
700-800	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
715-815	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
730-830	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
745-845	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
800-900	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2



TRAFFIC DATA SERVICES

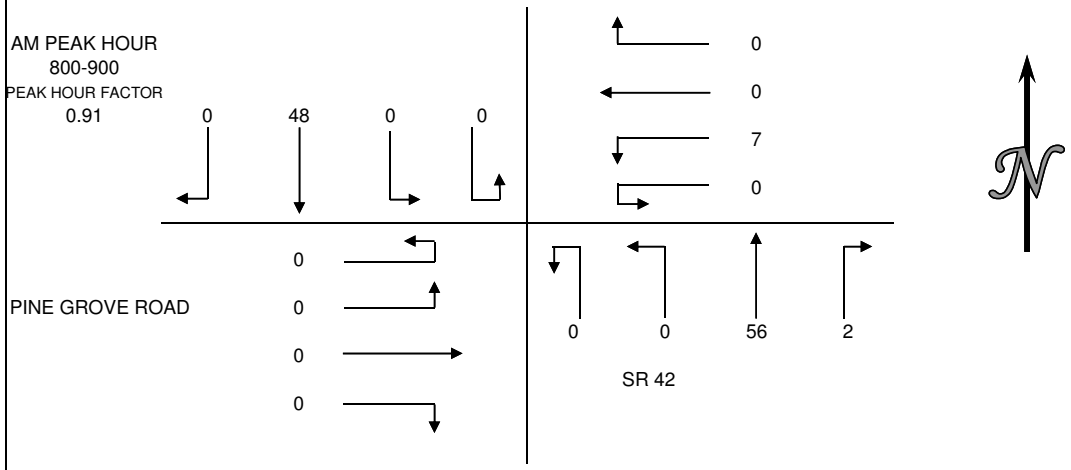
Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT HEAVY DUTY TRUCKS SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 7:00 AM TO 9:00 AM
INTERSECTION: N/S SR 42/US 23
E/W PINE GROVE ROAD

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
700-715	0	12	0	0	0	0	0	0	1	5	0	0	0	0	0	0	18
715-730	0	6	0	0	0	0	0	0	0	8	0	0	0	0	0	0	14
730-745	0	5	0	0	0	0	0	0	1	12	0	0	0	0	0	0	18
745-800	0	13	1	0	0	0	1	0	1	12	0	0	0	0	0	0	28
800-815	0	14	0	0	0	0	2	0	0	7	0	0	0	0	0	0	23
815-830	0	12	0	0	0	0	2	0	0	16	0	0	0	0	0	0	30
830-845	0	13	0	0	0	0	2	0	1	15	0	0	0	0	0	0	31
845-900	0	9	0	0	0	0	1	0	1	18	0	0	0	0	0	0	29
HOUR TOTALS																	
700-800	0	36	1	0	0	0	1	0	3	37	0	0	0	0	0	0	78
715-815	0	38	1	0	0	0	3	0	2	39	0	0	0	0	0	0	83
730-830	0	44	1	0	0	0	5	0	2	47	0	0	0	0	0	0	99
745-845	0	52	1	0	0	0	7	0	2	50	0	0	0	0	0	0	112
800-900	0	48	0	0	0	0	7	0	2	56	0	0	0	0	0	0	113



TRAFFIC DATA SERVICES

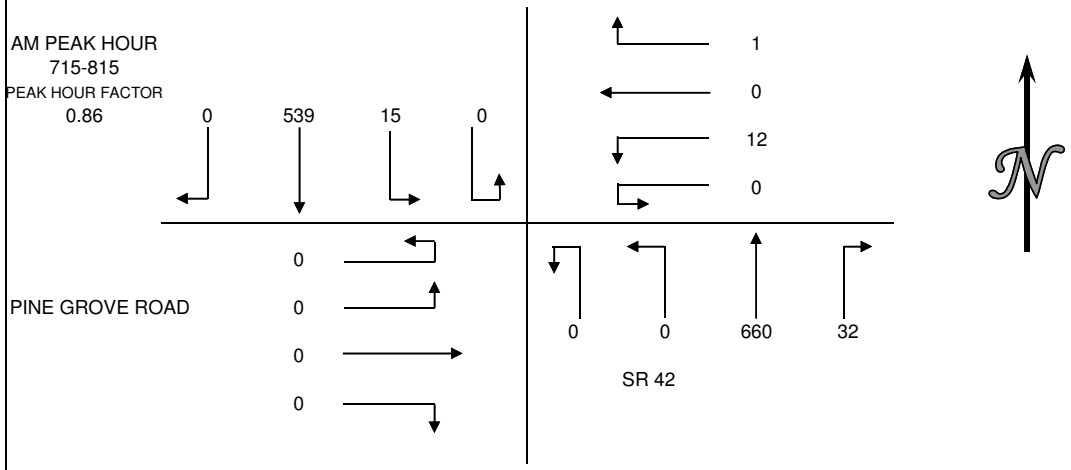
Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT ALL VEHICLES SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 7:00 AM TO 9:00 AM
INTERSECTION: N/S SR 42/US 23
E/W PINE GROVE ROAD

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
700-715	0	124	1	0	0	0	1	0	5	122	0	0	0	0	0	0	253
715-730	0	137	6	0	0	0	0	0	10	119	0	0	0	0	0	0	272
730-745	0	156	2	0	0	0	2	0	7	197	0	0	0	0	0	0	364
745-800	0	126	5	0	1	0	4	0	11	180	0	0	0	0	0	0	327
800-815	0	120	2	0	0	0	6	0	4	164	0	0	0	0	0	0	296
815-830	0	101	2	0	4	0	6	0	1	122	0	0	0	0	0	0	236
830-845	0	89	2	0	1	0	3	0	2	111	0	0	0	0	0	0	208
845-900	0	82	3	0	0	0	3	0	4	111	0	0	0	0	0	0	203
HOUR TOTALS																	
700-800	0	543	14	0	1	0	7	0	33	618	0	0	0	0	0	0	1216
715-815	0	539	15	0	1	0	12	0	32	660	0	0	0	0	0	0	1259
730-830	0	503	11	0	5	0	18	0	23	663	0	0	0	0	0	0	1223
745-845	0	436	11	0	6	0	19	0	18	577	0	0	0	0	0	0	1067
800-900	0	392	9	0	5	0	18	0	11	508	0	0	0	0	0	0	943



TRAFFIC DATA SERVICES

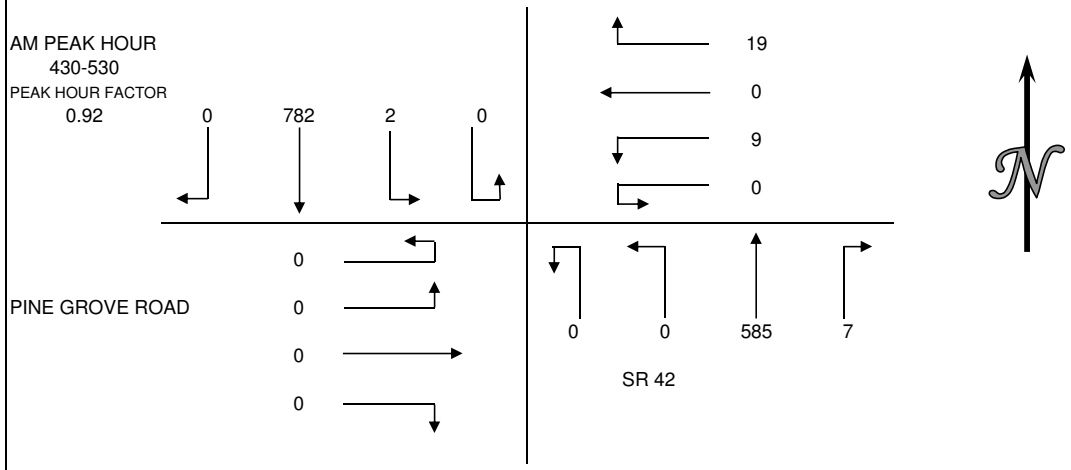
Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT CARS SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 4:00 PM TO 6:00 PM
INTERSECTION: N/S SR 42/US 23
E/W PINE GROVE ROAD

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
400-415	0	181	0	0	4	0	4	0	4	131	0	0	0	0	0	0	324
415-430	0	180	0	0	2	0	7	0	3	112	0	0	0	0	0	0	304
430-445	0	193	1	0	6	0	4	0	1	153	0	0	0	0	0	0	358
445-500	0	198	0	0	4	0	1	0	3	129	0	0	0	0	0	0	335
500-515	0	176	0	0	6	0	3	0	0	145	0	0	0	0	0	0	330
515-530	0	215	1	0	3	0	1	0	3	158	0	0	0	0	0	0	381
530-545	0	175	0	0	2	0	0	0	2	140	0	0	0	0	0	0	319
545-600	0	175	0	0	1	0	1	0	3	145	0	0	0	0	0	0	325
HOUR TOTALS																	
400-500	0	752	1	0	16	0	16	0	11	525	0	0	0	0	0	0	1321
415-515	0	747	1	0	18	0	15	0	7	539	0	0	0	0	0	0	1327
430-530	0	782	2	0	19	0	9	0	7	585	0	0	0	0	0	0	1404
445-545	0	764	1	0	15	0	5	0	8	572	0	0	0	0	0	0	1365
500-600	0	741	1	0	12	0	5	0	8	588	0	0	0	0	0	0	1355



TRAFFIC DATA SERVICES

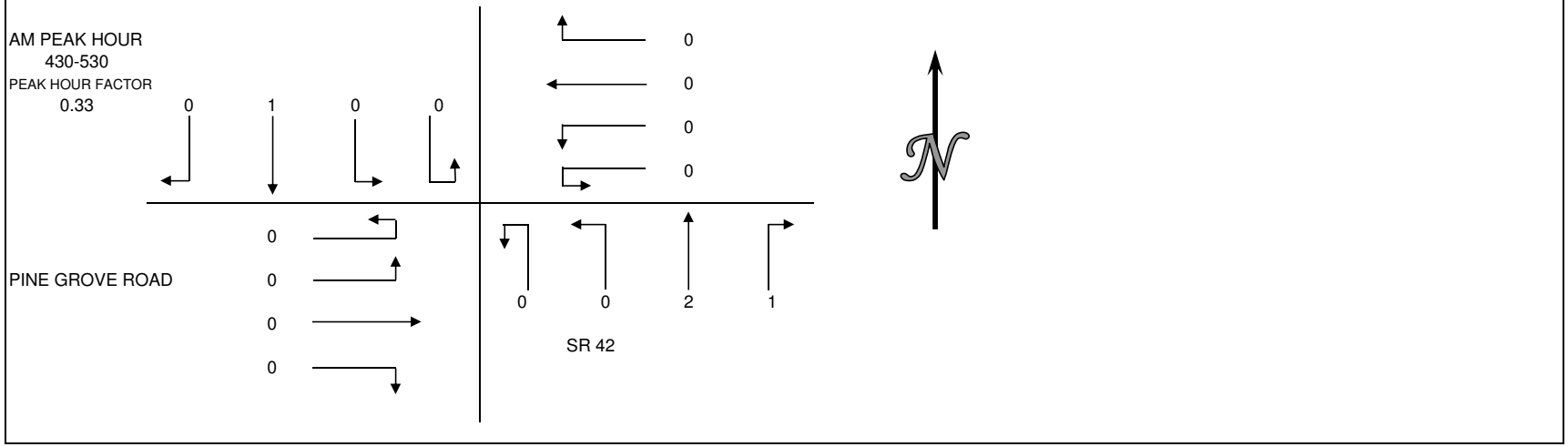
Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT SINGLE UNIT TRUCKS & BUSES SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 4:00 PM TO 6:00 PM
INTERSECTION: N/S SR 42/US 23
E/W PINE GROVE ROAD

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
400-415	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
415-430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
430-445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
445-500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
500-515	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
515-530	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	3
530-545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
545-600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HOUR TOTALS																	
400-500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
415-515	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
430-530	0	1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	4
445-545	0	1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	4
500-600	0	1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	4



TRAFFIC DATA SERVICES

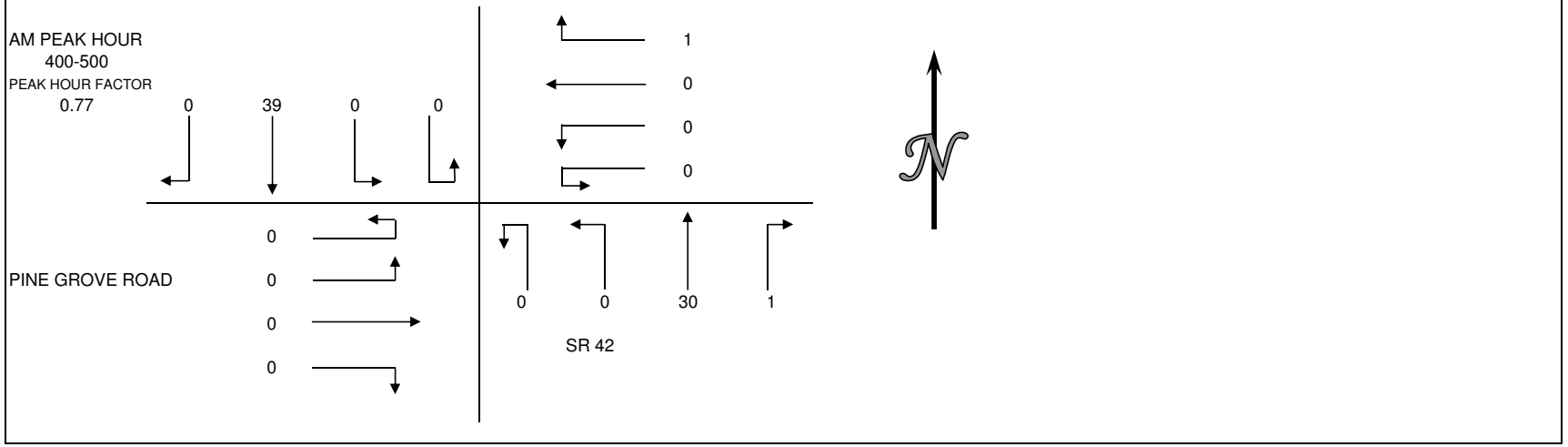
Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT HEAVY DUTY TRUCKS SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 4:00 PM TO 6:00 PM
INTERSECTION: N/S SR 42/US 23
E/W PINE GROVE ROAD

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
400-415	0	12	0	0	0	0	0	0	1	10	0	0	0	0	0	0	23
415-430	0	7	0	0	0	0	0	0	0	8	0	0	0	0	0	0	15
430-445	0	13	0	0	0	0	0	0	0	9	0	0	0	0	0	0	22
445-500	0	7	0	0	1	0	0	0	0	3	0	0	0	0	0	0	11
500-515	0	6	0	0	0	0	0	0	0	5	0	0	0	0	0	0	11
515-530	0	5	0	0	1	0	0	0	0	7	0	0	0	0	0	0	13
530-545	0	9	0	0	0	0	0	0	0	3	0	0	0	0	0	0	12
545-600	0	2	0	0	0	0	0	0	0	5	0	0	0	0	0	0	7
HOUR TOTALS																	
400-500	0	39	0	0	1	0	0	0	1	30	0	0	0	0	0	0	71
415-515	0	33	0	0	1	0	0	0	0	25	0	0	0	0	0	0	59
430-530	0	31	0	0	2	0	0	0	0	24	0	0	0	0	0	0	57
445-545	0	27	0	0	2	0	0	0	0	18	0	0	0	0	0	0	47
500-600	0	22	0	0	1	0	0	0	0	20	0	0	0	0	0	0	43



TRAFFIC DATA SERVICES

Phone: (678) 687-8266 Fax: (404) 294-6122

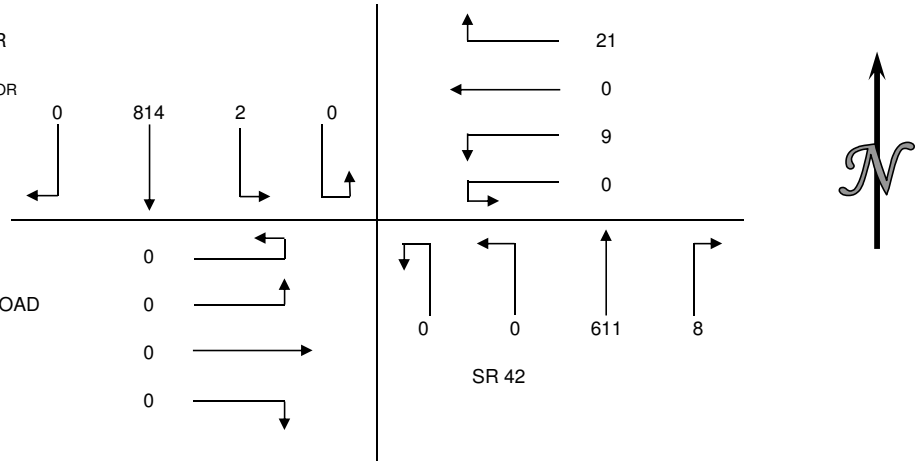
INTERSECTION TURNING MOVEMENT COUNT ALL VEHICLES SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 4:00 PM TO 6:00 PM
INTERSECTION: N/S SR 42/US 23
E/W PINE GROVE ROAD

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
400-415	0	193	0	0	4	0	4	0	5	141	0	0	0	0	0	0	347
415-430	0	187	0	0	2	0	7	0	3	120	0	0	0	0	0	0	319
430-445	0	206	1	0	6	0	4	0	1	162	0	0	0	0	0	0	380
445-500	0	205	0	0	5	0	1	0	3	132	0	0	0	0	0	0	346
500-515	0	182	0	0	6	0	3	0	1	150	0	0	0	0	0	0	342
515-530	0	221	1	0	4	0	1	0	3	167	0	0	0	0	0	0	397
530-545	0	184	0	0	2	0	0	0	2	143	0	0	0	0	0	0	331
545-600	0	177	0	0	1	0	1	0	3	150	0	0	0	0	0	0	332
HOUR TOTALS																	
400-500	0	791	1	0	17	0	16	0	12	555	0	0	0	0	0	0	1392
415-515	0	780	1	0	19	0	15	0	8	564	0	0	0	0	0	0	1387
430-530	0	814	2	0	21	0	9	0	8	611	0	0	0	0	0	0	1465
445-545	0	792	1	0	17	0	5	0	9	592	0	0	0	0	0	0	1416
500-600	0	764	1	0	13	0	5	0	9	610	0	0	0	0	0	0	1402

AM PEAK HOUR
430-530
PEAK HOUR FACTOR
0.92



TRAFFIC DATA SERVICES

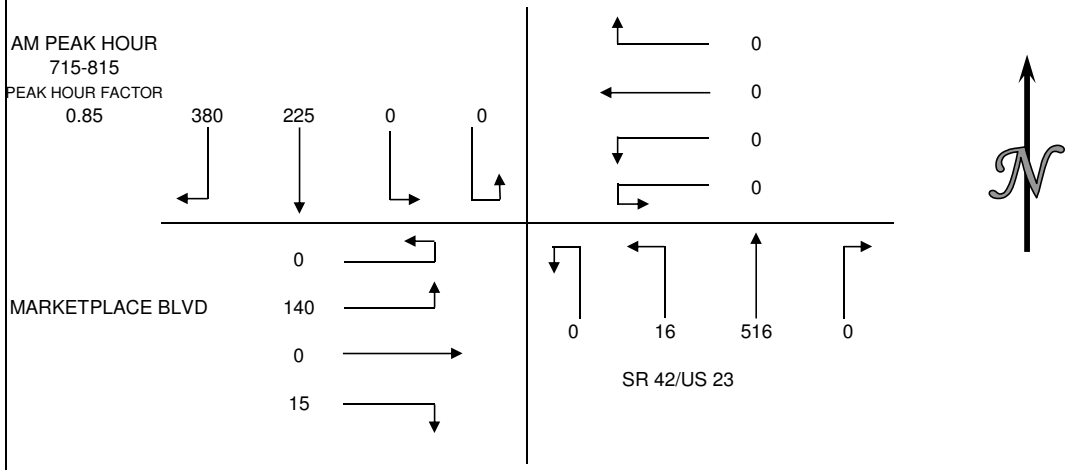
Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT CARS SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 7:00 AM TO 9:00 AM
INTERSECTION: N/S SR 42/US 23
E/W MARKETPLACE BLVD

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
700-715	74	42	0	0	0	0	0	0	0	97	4	0	4	0	28	0	249
715-730	107	45	0	0	0	0	0	0	0	97	4	0	1	0	31	0	285
730-745	131	62	0	0	0	0	0	0	0	156	3	0	3	0	27	0	382
745-800	70	56	0	0	0	0	0	0	0	144	6	0	9	0	29	0	314
800-815	72	62	0	0	0	0	0	0	0	119	3	0	2	0	53	0	311
815-830	40	54	0	0	0	0	0	0	0	87	2	0	4	0	31	0	218
830-845	40	36	0	0	0	0	0	0	0	78	6	0	2	0	27	0	189
845-900	52	40	0	0	0	0	0	0	0	78	4	0	3	0	31	0	208
HOUR TOTALS																	
700-800	382	205	0	0	0	0	0	0	0	494	17	0	17	0	115	0	1230
715-815	380	225	0	0	0	0	0	0	0	516	16	0	15	0	140	0	1292
730-830	313	234	0	0	0	0	0	0	0	506	14	0	18	0	140	0	1225
745-845	222	208	0	0	0	0	0	0	0	428	17	0	17	0	140	0	1032
800-900	204	192	0	0	0	0	0	0	0	362	15	0	11	0	142	0	926



TRAFFIC DATA SERVICES

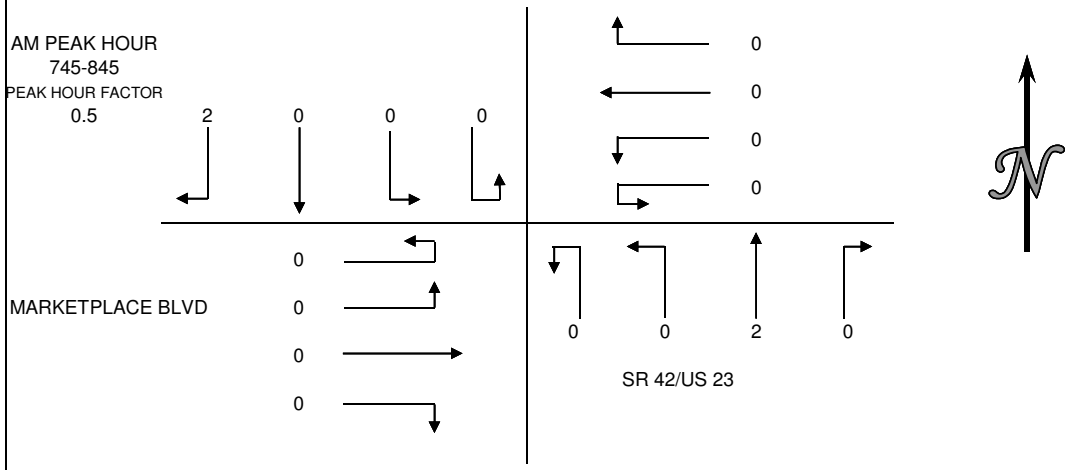
Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT SINGLE UNIT TRUCKS & BUSES SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 7:00 AM TO 9:00 AM
INTERSECTION: N/S SR 42/US 23
E/W MARKETPLACE BLVD

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
700-715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
715-730	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
730-745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
745-800	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
800-815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
815-830	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
830-845	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
845-900	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
HOUR TOTALS																	
700-800	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
715-815	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
730-830	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	3
745-845	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	4
800-900	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	4



TRAFFIC DATA SERVICES

Phone: (678) 687-8266 Fax: (404) 294-6122

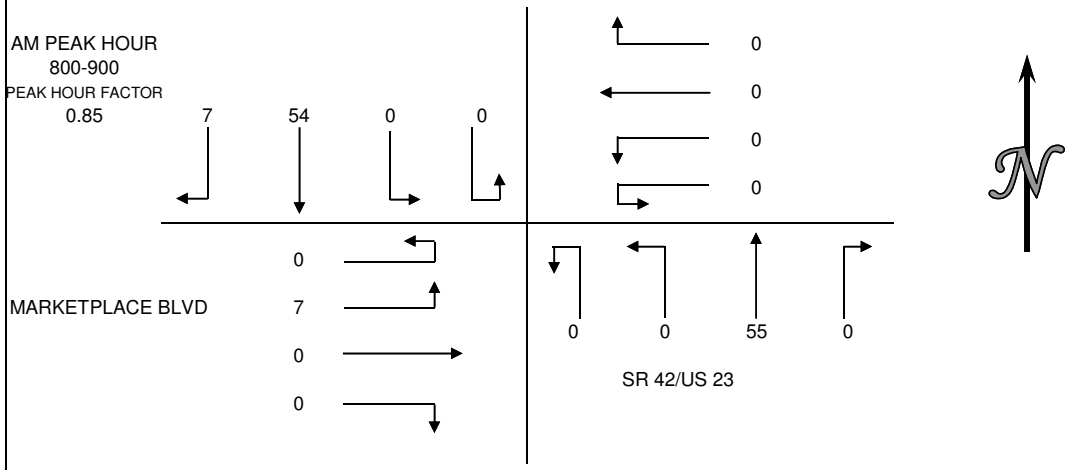
INTERSECTION TURNING MOVEMENT COUNT HEAVY DUTY TRUCKS SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 7:00 AM TO 9:00 AM
INTERSECTION: N/S SR 42/US 23
E/W MARKETPLACE BLVD

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
700-715	3	8	0	0	0	0	0	0	0	7	0	0	0	0	1	0	19
715-730	2	8	0	0	0	0	0	0	0	4	0	0	0	0	1	0	15
730-745	1	6	0	0	0	0	0	0	0	12	0	0	0	0	4	0	23
745-800	1	9	0	0	0	0	0	0	0	7	0	0	0	0	2	0	19
800-815	3	17	0	0	0	0	0	0	0	10	0	0	0	0	2	0	32
815-830	1	17	0	0	0	0	0	0	0	18	0	0	0	0	0	0	36
830-845	2	10	0	0	0	0	0	0	0	12	0	0	0	0	3	0	27
845-900	1	10	0	0	0	0	0	0	0	15	0	0	0	0	2	0	28
HOUR TOTALS																	
700-800	7	31	0	0	0	0	0	0	0	30	0	0	0	0	8	0	76
715-815	7	40	0	0	0	0	0	0	0	33	0	0	0	0	9	0	89
730-830	6	49	0	0	0	0	0	0	0	47	0	0	0	0	8	0	110
745-845	7	53	0	0	0	0	0	0	0	47	0	0	0	0	7	0	114
800-900	7	54	0	0	0	0	0	0	0	55	0	0	0	0	7	0	123

AM PEAK HOUR
800-900
PEAK HOUR FACTOR
0.85



TRAFFIC DATA SERVICES

Phone: (678) 687-8266 Fax: (404) 294-6122

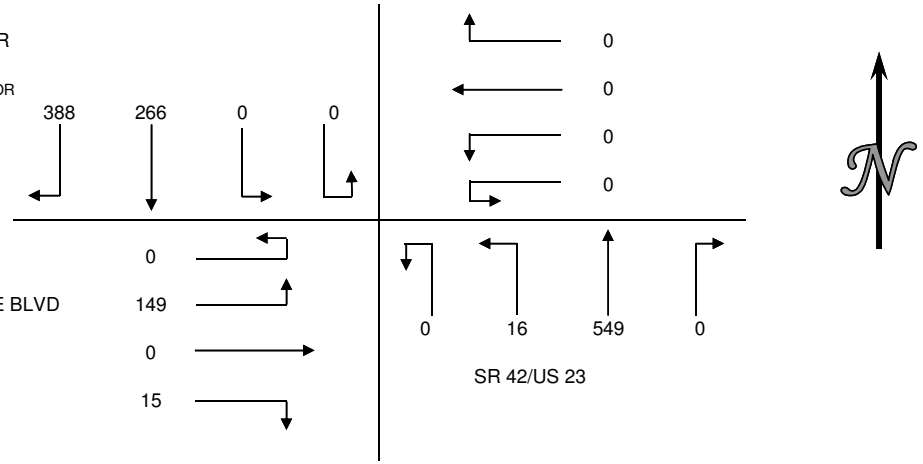
INTERSECTION TURNING MOVEMENT COUNT ALL VEHICLES SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 7:00 AM TO 9:00 AM
INTERSECTION: N/S SR 42/US 23
E/W MARKETPLACE BLVD

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
700-715	77	50	0	0	0	0	0	0	0	104	4	0	4	0	29	0	268
715-730	109	54	0	0	0	0	0	0	0	101	4	0	1	0	32	0	301
730-745	132	68	0	0	0	0	0	0	0	168	3	0	3	0	31	0	405
745-800	72	65	0	0	0	0	0	0	0	151	6	0	9	0	31	0	334
800-815	75	79	0	0	0	0	0	0	0	129	3	0	2	0	55	0	343
815-830	41	71	0	0	0	0	0	0	0	107	2	0	4	0	31	0	256
830-845	43	46	0	0	0	0	0	0	0	90	6	0	2	0	30	0	217
845-900	53	50	0	0	0	0	0	0	0	94	4	0	3	0	33	0	237
HOUR TOTALS																	
700-800	390	237	0	0	0	0	0	0	0	524	17	0	17	0	123	0	1308
715-815	388	266	0	0	0	0	0	0	0	549	16	0	15	0	149	0	1383
730-830	320	283	0	0	0	0	0	0	0	555	14	0	18	0	148	0	1338
745-845	231	261	0	0	0	0	0	0	0	477	17	0	17	0	147	0	1150
800-900	212	246	0	0	0	0	0	0	0	420	15	0	11	0	149	0	1053

AM PEAK HOUR
715-815
PEAK HOUR FACTOR
0.85



TRAFFIC DATA SERVICES

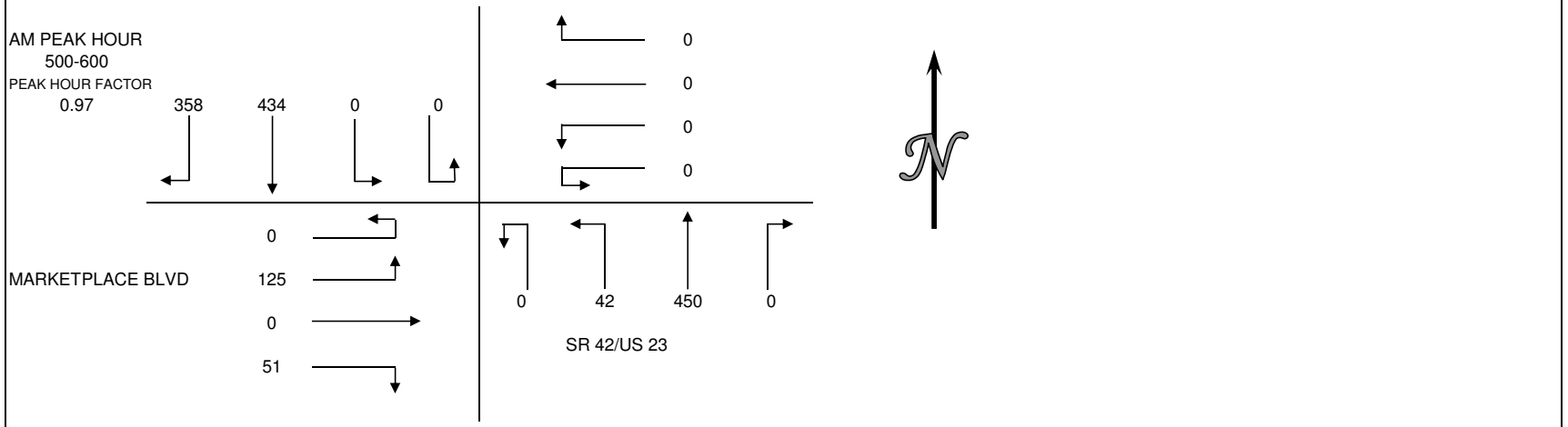
Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT CARS SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 4:00 PM TO 6:00 PM
INTERSECTION: N/S SR 42/US 23
E/W MARKETPLACE BLVD

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
400-415	83	101	0	0	0	0	0	0	0	103	7	0	12	0	31	0	337
415-430	84	91	0	0	0	0	0	0	0	85	1	0	11	0	32	0	304
430-445	74	115	0	0	0	0	0	0	0	113	6	0	11	0	31	0	350
445-500	85	98	0	0	0	0	0	0	0	112	8	0	11	0	37	0	351
500-515	80	103	0	0	0	0	0	0	0	120	12	0	9	0	24	0	348
515-530	88	120	0	0	0	0	0	0	0	110	7	0	12	0	33	0	370
530-545	95	95	0	0	0	0	0	0	0	116	16	0	17	0	37	0	376
545-600	95	116	0	0	0	0	0	0	0	104	7	0	13	0	31	0	366
HOUR TOTALS																	
400-500	326	405	0	0	0	0	0	0	0	413	22	0	45	0	131	0	1342
415-515	323	407	0	0	0	0	0	0	0	430	27	0	42	0	124	0	1353
430-530	327	436	0	0	0	0	0	0	0	455	33	0	43	0	125	0	1419
445-545	348	416	0	0	0	0	0	0	0	458	43	0	49	0	131	0	1445
500-600	358	434	0	0	0	0	0	0	0	450	42	0	51	0	125	0	1460



TRAFFIC DATA SERVICES

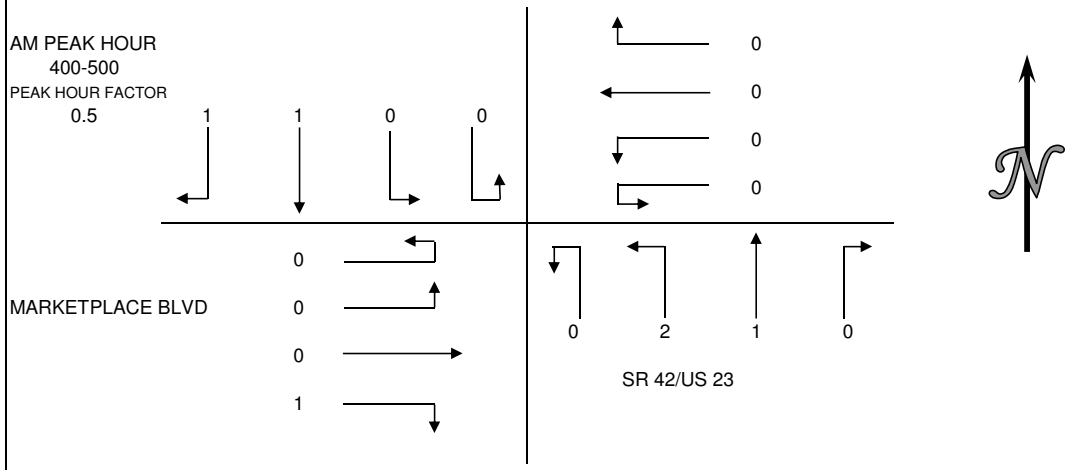
Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT SINGLE UNIT TRUCKS & BUSES SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 4:00 PM TO 6:00 PM
INTERSECTION: N/S SR 42/US 23
E/W MARKETPLACE BLVD

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
400-415	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
415-430	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
430-445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
445-500	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	3
500-515	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
515-530	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	3
530-545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
545-600	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
HOUR TOTALS																	
400-500	1	1	0	0	0	0	0	0	0	1	2	0	1	0	0	0	6
415-515	1	1	0	0	0	0	0	0	0	1	1	0	1	0	0	0	5
430-530	1	1	0	0	0	0	0	0	0	2	1	0	1	0	0	0	6
445-545	1	1	0	0	0	0	0	0	0	2	1	0	1	0	0	0	6
500-600	2	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	5



TRAFFIC DATA SERVICES

Phone: (678) 687-8266 Fax: (404) 294-6122

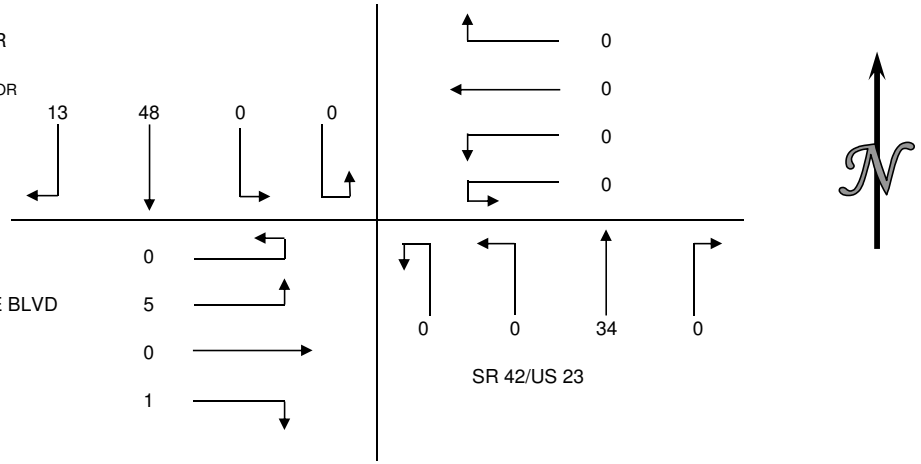
INTERSECTION TURNING MOVEMENT COUNT HEAVY DUTY TRUCKS SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 4:00 PM TO 6:00 PM
INTERSECTION: N/S SR 42/US 23
E/W MARKETPLACE BLVD

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
400-415	4	12	0	0	0	0	0	0	0	10	0	0	0	0	0	0	26
415-430	4	13	0	0	0	0	0	0	0	10	0	0	0	0	1	0	28
430-445	3	14	0	0	0	0	0	0	0	10	0	0	1	0	2	0	30
445-500	2	9	0	0	0	0	0	0	0	4	0	0	0	0	2	0	17
500-515	3	6	0	0	0	0	0	0	0	5	0	0	0	0	1	0	15
515-530	3	8	0	0	0	0	0	0	0	5	0	0	0	0	0	0	16
530-545	2	9	0	0	0	0	0	0	0	11	0	0	0	0	0	0	22
545-600	3	1	0	0	0	0	0	0	0	4	0	0	0	0	0	0	8
HOUR TOTALS																	
400-500	13	48	0	0	0	0	0	0	0	34	0	0	1	0	5	0	101
415-515	12	42	0	0	0	0	0	0	0	29	0	0	1	0	6	0	90
430-530	11	37	0	0	0	0	0	0	0	24	0	0	1	0	5	0	78
445-545	10	32	0	0	0	0	0	0	0	25	0	0	0	0	3	0	70
500-600	11	24	0	0	0	0	0	0	0	25	0	0	0	0	1	0	61

AM PEAK HOUR
400-500
PEAK HOUR FACTOR
0.84



TRAFFIC DATA SERVICES

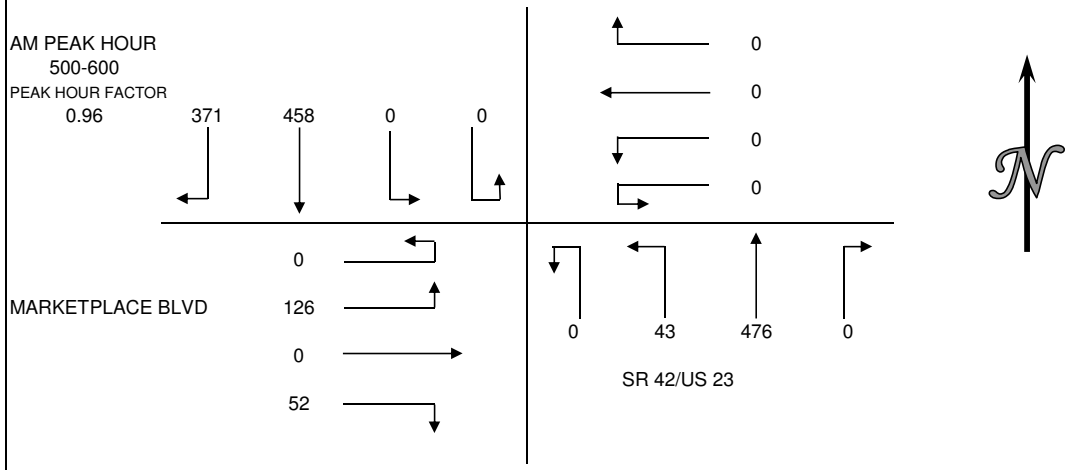
Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT ALL VEHICLES SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 4:00 PM TO 6:00 PM
INTERSECTION: N/S SR 42/US 23
E/W MARKETPLACE BLVD

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
400-415	87	113	0	0	0	0	0	0	0	113	8	0	12	0	31	0	364
415-430	89	104	0	0	0	0	0	0	0	95	1	0	12	0	33	0	334
430-445	77	129	0	0	0	0	0	0	0	123	6	0	12	0	33	0	380
445-500	87	108	0	0	0	0	0	0	0	117	9	0	11	0	39	0	371
500-515	83	109	0	0	0	0	0	0	0	125	12	0	9	0	25	0	363
515-530	92	128	0	0	0	0	0	0	0	116	7	0	13	0	33	0	389
530-545	97	104	0	0	0	0	0	0	0	127	16	0	17	0	37	0	398
545-600	99	117	0	0	0	0	0	0	0	108	8	0	13	0	31	0	376
HOUR TOTALS																	
400-500	340	454	0	0	0	0	0	0	0	448	24	0	47	0	136	0	1449
415-515	336	450	0	0	0	0	0	0	0	460	28	0	44	0	130	0	1448
430-530	339	474	0	0	0	0	0	0	0	481	34	0	45	0	130	0	1503
445-545	359	449	0	0	0	0	0	0	0	485	44	0	50	0	134	0	1521
500-600	371	458	0	0	0	0	0	0	0	476	43	0	52	0	126	0	1526



TRAFFIC DATA SERVICES

Phone: (678) 687-8266 Fax: (404) 294-6122

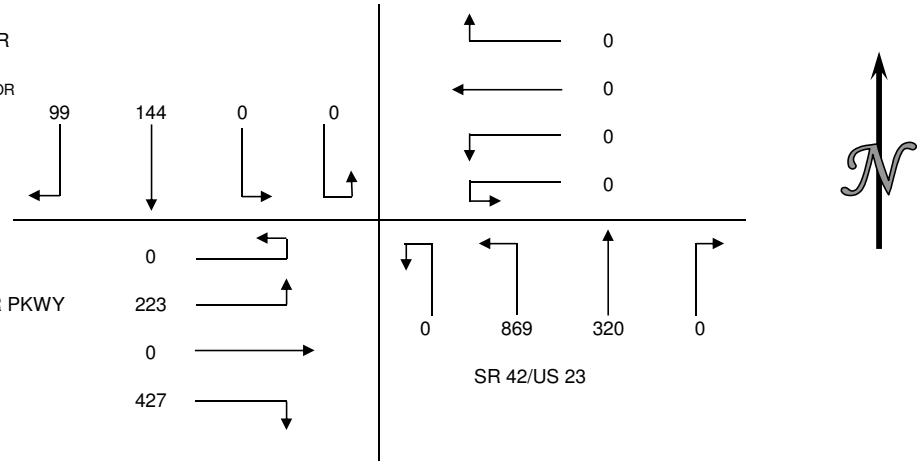
INTERSECTION TURNING MOVEMENT COUNT CARS SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 7:00 AM TO 9:00 AM
INTERSECTION: N/S SR 42/US 23
E/W BILL GARDNER PKWY

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
700-715	14	29	0	0	0	0	0	0	0	69	201	0	60	0	35	0	408
715-730	22	24	0	0	0	0	0	0	0	65	221	0	92	0	44	0	468
730-745	23	45	0	0	0	0	0	0	0	99	229	0	103	0	58	0	557
745-800	27	41	0	0	0	0	0	0	0	86	209	0	116	0	65	0	544
800-815	27	34	0	0	0	0	0	0	0	70	210	0	116	0	56	0	513
815-830	20	46	0	0	0	0	0	0	0	55	186	0	98	0	38	0	443
830-845	14	29	0	0	0	0	0	0	0	58	170	0	94	0	25	0	390
845-900	11	6	0	0	0	0	0	0	0	76	166	0	93	0	13	0	365
HOUR TOTALS																	
700-800	86	139	0	0	0	0	0	0	0	319	860	0	371	0	202	0	1977
715-815	99	144	0	0	0	0	0	0	0	320	869	0	427	0	223	0	2082
730-830	97	166	0	0	0	0	0	0	0	310	834	0	433	0	217	0	2057
745-845	88	150	0	0	0	0	0	0	0	269	775	0	424	0	184	0	1890
800-900	72	115	0	0	0	0	0	0	0	259	732	0	401	0	132	0	1711

AM PEAK HOUR
715-815
PEAK HOUR FACTOR
0.93



TRAFFIC DATA SERVICES

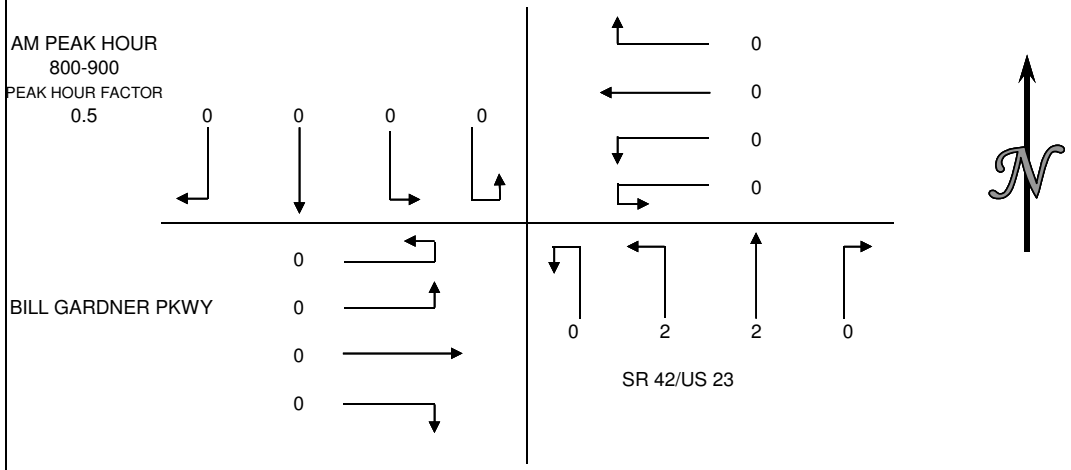
Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT SINGLE UNIT TRUCKS & BUSES SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 7:00 AM TO 9:00 AM
INTERSECTION: N/S SR 42/US 23
E/W BILL GARDNER PKWY

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
700-715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
715-730	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
730-745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
745-800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
800-815	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
815-830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
830-845	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
845-900	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
HOUR TOTALS																	
700-800	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
715-815	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
730-830	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
745-845	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
800-900	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	4



TRAFFIC DATA SERVICES

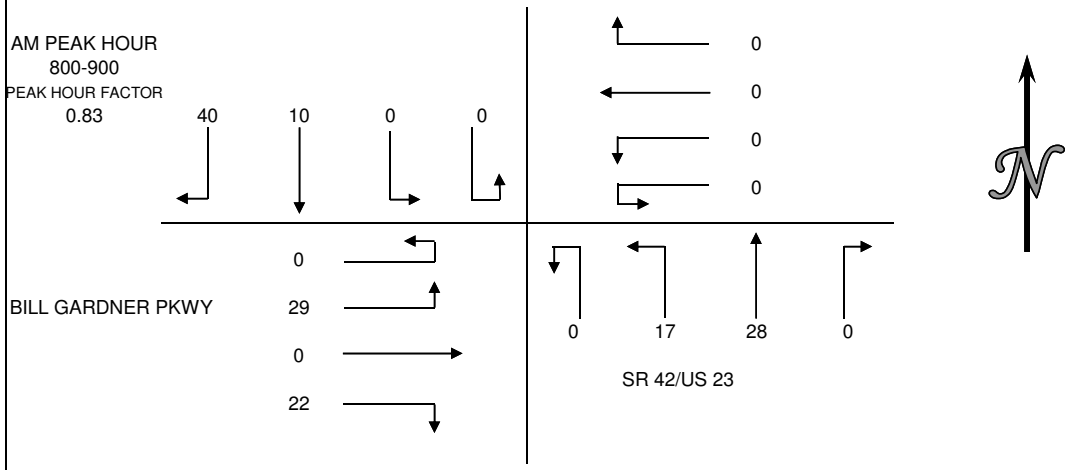
Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT HEAVY DUTY TRUCKS SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 7:00 AM TO 9:00 AM
INTERSECTION: N/S SR 42/US 23
E/W BILL GARDNER PKWY

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
700-715	5	2	0	0	0	0	0	0	0	2	1	0	6	0	10	0	26
715-730	8	2	0	0	0	0	0	0	0	1	5	0	11	0	2	0	29
730-745	5	4	0	0	0	0	0	0	0	3	0	0	4	0	8	0	24
745-800	7	6	0	0	0	0	0	0	0	3	7	0	2	0	5	0	30
800-815	11	1	0	0	0	0	0	0	0	5	5	0	6	0	6	0	34
815-830	14	3	0	0	0	0	0	0	0	10	3	0	5	0	9	0	44
830-845	9	4	0	0	0	0	0	0	0	3	3	0	8	0	5	0	32
845-900	6	2	0	0	0	0	0	0	0	10	6	0	3	0	9	0	36
HOUR TOTALS																	
700-800	25	14	0	0	0	0	0	0	0	9	13	0	23	0	25	0	109
715-815	31	13	0	0	0	0	0	0	0	12	17	0	23	0	21	0	117
730-830	37	14	0	0	0	0	0	0	0	21	15	0	17	0	28	0	132
745-845	41	14	0	0	0	0	0	0	0	21	18	0	21	0	25	0	140
800-900	40	10	0	0	0	0	0	0	0	28	17	0	22	0	29	0	146



TRAFFIC DATA SERVICES

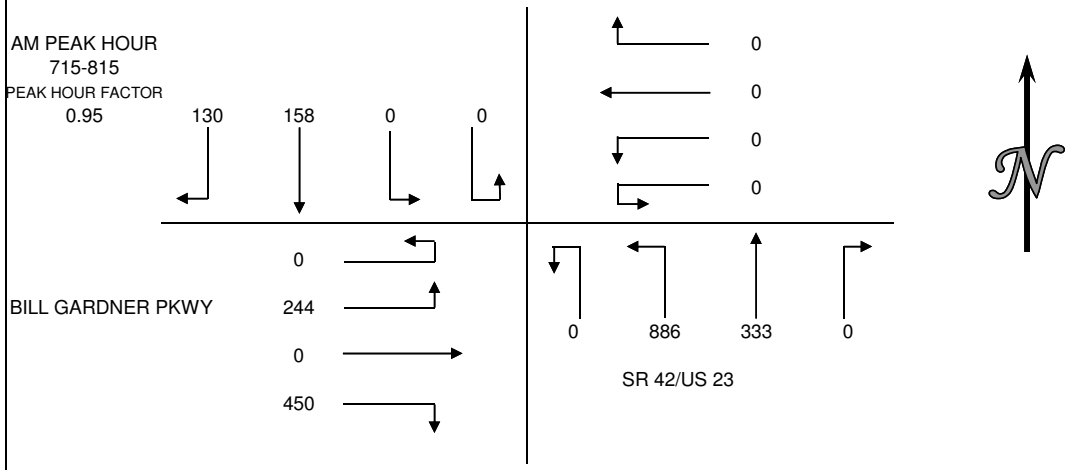
Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT ALL VEHICLES SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 7:00 AM TO 9:00 AM
INTERSECTION: N/S SR 42/US 23
E/W BILL GARDNER PKWY

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
700-715	19	31	0	0	0	0	0	0	0	71	202	0	66	0	45	0	434
715-730	30	27	0	0	0	0	0	0	0	66	226	0	103	0	46	0	498
730-745	28	49	0	0	0	0	0	0	0	102	229	0	107	0	66	0	581
745-800	34	47	0	0	0	0	0	0	0	89	216	0	118	0	70	0	574
800-815	38	35	0	0	0	0	0	0	0	76	215	0	122	0	62	0	548
815-830	34	49	0	0	0	0	0	0	0	65	189	0	103	0	47	0	487
830-845	23	33	0	0	0	0	0	0	0	61	174	0	102	0	30	0	423
845-900	17	8	0	0	0	0	0	0	0	87	173	0	96	0	22	0	403
HOUR TOTALS																	
700-800	111	154	0	0	0	0	0	0	0	328	873	0	394	0	227	0	2087
715-815	130	158	0	0	0	0	0	0	0	333	886	0	450	0	244	0	2201
730-830	134	180	0	0	0	0	0	0	0	332	849	0	450	0	245	0	2190
745-845	129	164	0	0	0	0	0	0	0	291	794	0	445	0	209	0	2032
800-900	112	125	0	0	0	0	0	0	0	289	751	0	423	0	161	0	1861



TRAFFIC DATA SERVICES

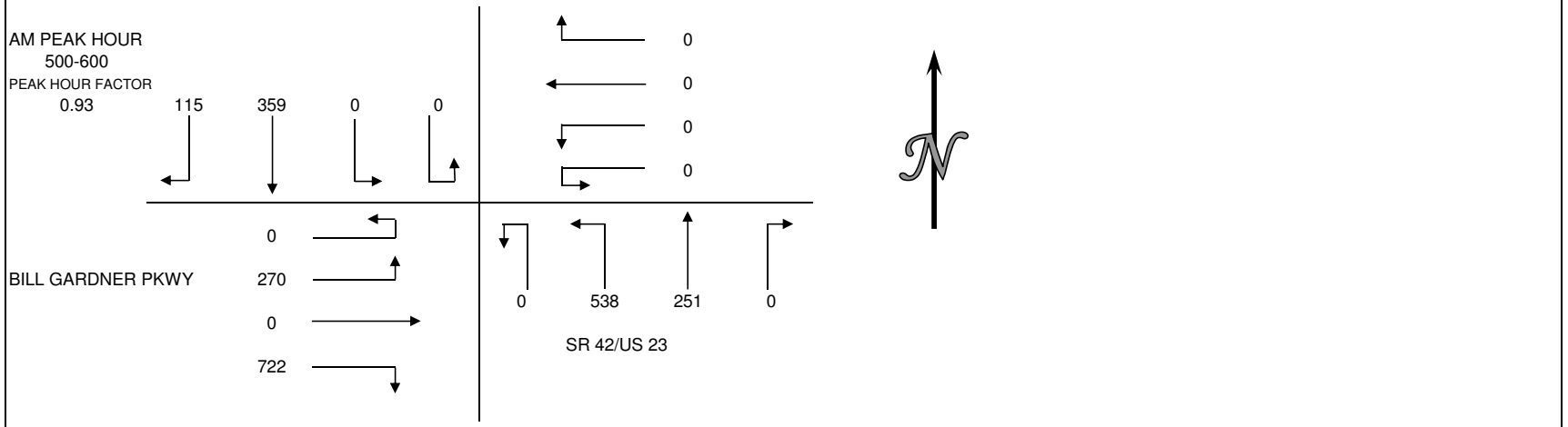
Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT CARS SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 4:00 PM TO 6:00 PM
INTERSECTION: N/S SR 42/US 23
E/W BILL GARDNER PKWY

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
400-415	27	86	0	0	0	0	0	0	0	58	108	0	162	0	66	0	507
415-430	25	72	0	0	0	0	0	0	0	46	134	0	202	0	46	0	525
430-445	35	89	0	0	0	0	0	0	0	69	134	0	177	0	70	0	574
445-500	32	77	0	0	0	0	0	0	0	70	144	0	192	0	53	0	568
500-515	32	76	0	0	0	0	0	0	0	64	138	0	186	0	80	0	576
515-530	24	100	0	0	0	0	0	0	0	58	131	0	151	0	69	0	533
530-545	31	87	0	0	0	0	0	0	0	70	126	0	161	0	66	0	541
545-600	28	96	0	0	0	0	0	0	0	59	143	0	224	0	55	0	605
HOUR TOTALS																	
400-500	119	324	0	0	0	0	0	0	0	243	520	0	733	0	235	0	2174
415-515	124	314	0	0	0	0	0	0	0	249	550	0	757	0	249	0	2243
430-530	123	342	0	0	0	0	0	0	0	261	547	0	706	0	272	0	2251
445-545	119	340	0	0	0	0	0	0	0	262	539	0	690	0	268	0	2218
500-600	115	359	0	0	0	0	0	0	0	251	538	0	722	0	270	0	2255



TRAFFIC DATA SERVICES

Phone: (678) 687-8266 Fax: (404) 294-6122

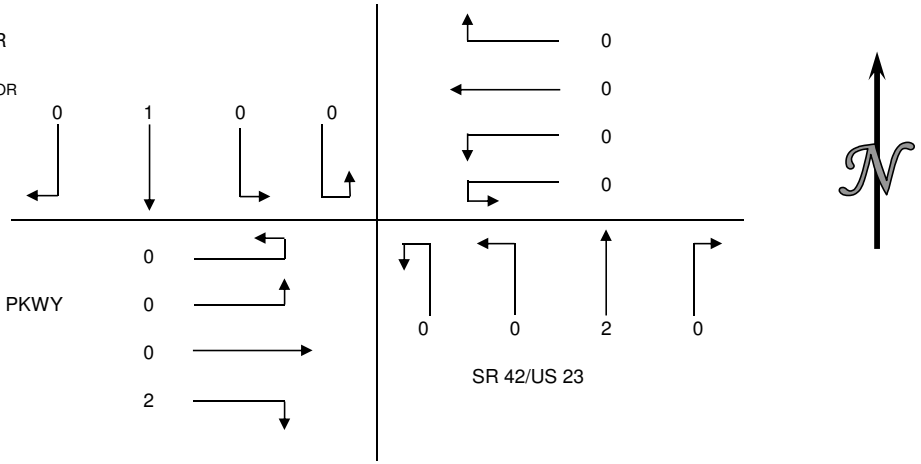
INTERSECTION TURNING MOVEMENT COUNT SINGLE UNIT TRUCKS & BUSES SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 4:00 PM TO 6:00 PM
INTERSECTION: N/S SR 42/US 23
E/W BILL GARDNER PKWY

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
400-415	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
415-430	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
430-445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
445-500	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
500-515	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
515-530	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
530-545	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
545-600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HOUR TOTALS																	
400-500	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2
415-515	0	1	0	0	0	0	0	0	0	1	1	0	1	0	0	0	4
430-530	0	1	0	0	0	0	0	0	0	2	0	0	1	0	0	0	4
445-545	0	1	0	0	0	0	0	0	0	2	0	0	2	0	0	0	5
500-600	0	1	0	0	0	0	0	0	0	2	0	0	1	0	0	0	4

AM PEAK HOUR
445-545
PEAK HOUR FACTOR
0.63



TRAFFIC DATA SERVICES

Phone: (678) 687-8266 Fax: (404) 294-6122

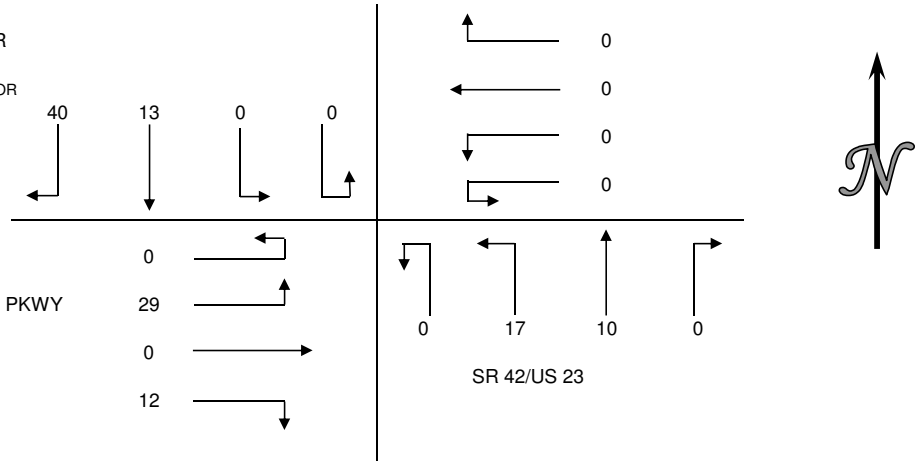
INTERSECTION TURNING MOVEMENT COUNT HEAVY DUTY TRUCKS SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 4:00 PM TO 6:00 PM
INTERSECTION: N/S SR 42/US 23
E/W BILL GARDNER PKWY

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
400-415	6	6	0	0	0	0	0	0	0	1	5	0	6	0	8	0	32
415-430	11	2	0	0	0	0	0	0	0	5	3	0	4	0	9	0	34
430-445	12	3	0	0	0	0	0	0	0	4	7	0	0	0	6	0	32
445-500	11	2	0	0	0	0	0	0	0	0	2	0	2	0	6	0	23
500-515	5	0	0	0	0	0	0	0	0	1	3	0	2	0	5	0	16
515-530	9	0	0	0	0	0	0	0	0	0	3	0	1	0	5	0	18
530-545	5	0	0	0	0	0	0	0	0	3	3	0	1	0	12	0	24
545-600	7	1	0	0	0	0	0	0	0	2	3	0	1	0	2	0	16
HOUR TOTALS																	
400-500	40	13	0	0	0	0	0	0	0	10	17	0	12	0	29	0	121
415-515	39	7	0	0	0	0	0	0	0	10	15	0	8	0	26	0	105
430-530	37	5	0	0	0	0	0	0	0	5	15	0	5	0	22	0	89
445-545	30	2	0	0	0	0	0	0	0	4	11	0	6	0	28	0	81
500-600	26	1	0	0	0	0	0	0	0	6	12	0	5	0	24	0	74

AM PEAK HOUR
400-500
PEAK HOUR FACTOR
0.89



TRAFFIC DATA SERVICES

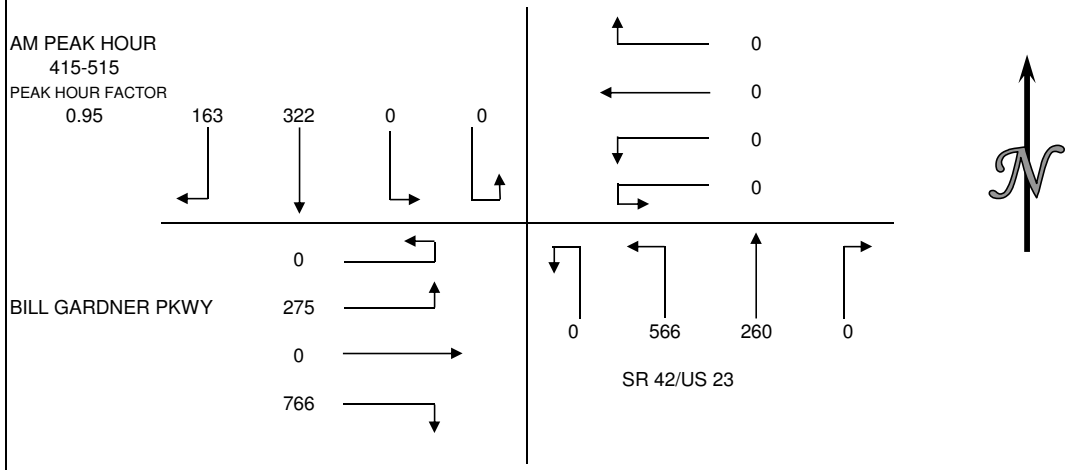
Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT ALL VEHICLES SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 4:00 PM TO 6:00 PM
INTERSECTION: N/S SR 42/US 23
E/W BILL GARDNER PKWY

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
400-415	33	92	0	0	0	0	0	0	0	59	113	0	168	0	74	0	539
415-430	36	74	0	0	0	0	0	0	0	51	138	0	206	0	55	0	560
430-445	47	92	0	0	0	0	0	0	0	73	141	0	177	0	76	0	606
445-500	43	79	0	0	0	0	0	0	0	70	146	0	195	0	59	0	592
500-515	37	77	0	0	0	0	0	0	0	66	141	0	188	0	85	0	594
515-530	33	100	0	0	0	0	0	0	0	59	134	0	152	0	74	0	552
530-545	36	87	0	0	0	0	0	0	0	73	129	0	163	0	78	0	566
545-600	35	97	0	0	0	0	0	0	0	61	146	0	225	0	57	0	621
HOUR TOTALS																	
400-500	159	337	0	0	0	0	0	0	0	253	538	0	746	0	264	0	2297
415-515	163	322	0	0	0	0	0	0	0	260	566	0	766	0	275	0	2352
430-530	160	348	0	0	0	0	0	0	0	268	562	0	712	0	294	0	2344
445-545	149	343	0	0	0	0	0	0	0	268	550	0	698	0	296	0	2304
500-600	141	361	0	0	0	0	0	0	0	259	550	0	728	0	294	0	2333



TRAFFIC DATA SERVICES

Phone: (678) 687-8266 Fax: (404) 294-6122

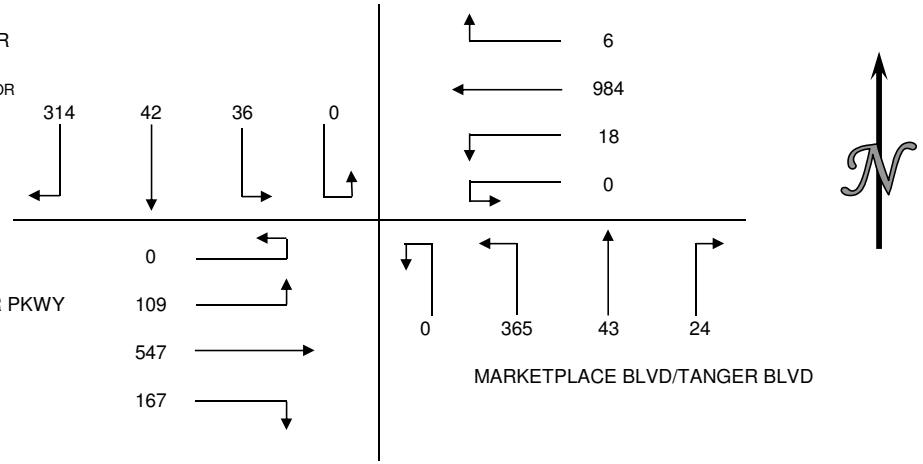
INTERSECTION TURNING MOVEMENT COUNT CARS SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 7:00 AM TO 9:00 AM
INTERSECTION: N/S MARKETPLACE BLVD/TANGER BLVD
E/W BILL GARDNER PKWY

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
700-715	64	9	7	0	3	277	9	0	8	7	73	0	30	99	30	0	616
715-730	76	7	10	0	2	246	3	0	7	13	86	0	36	119	21	0	626
730-745	96	13	11	0	0	249	2	0	3	10	116	0	42	157	28	0	727
745-800	78	13	8	0	1	212	4	0	6	13	90	0	59	172	30	0	686
800-815	39	14	7	0	4	201	6	0	10	10	70	0	59	135	38	0	593
815-830	22	14	12	0	1	192	18	0	8	10	79	0	67	115	22	0	560
830-845	40	9	14	0	4	181	12	0	11	13	59	0	42	107	20	0	512
845-900	30	22	11	0	1	171	11	0	11	7	43	0	50	115	23	0	495
HOUR TOTALS																	
700-800	314	42	36	0	6	984	18	0	24	43	365	0	167	547	109	0	2655
715-815	289	47	36	0	7	908	15	0	26	46	362	0	196	583	117	0	2632
730-830	235	54	38	0	6	854	30	0	27	43	355	0	227	579	118	0	2566
745-845	179	50	41	0	10	786	40	0	35	46	298	0	227	529	110	0	2351
800-900	131	59	44	0	10	745	47	0	40	40	251	0	218	472	103	0	2160

AM PEAK HOUR
700-800
PEAK HOUR FACTOR
0.91



TRAFFIC DATA SERVICES

Phone: (678) 687-8266 Fax: (404) 294-6122

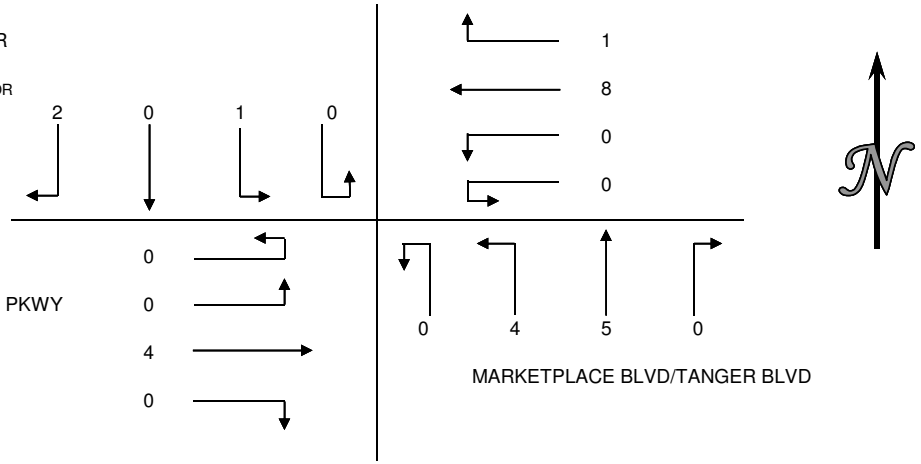
INTERSECTION TURNING MOVEMENT COUNT SINGLE UNIT TRUCKS & BUSES SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 7:00 AM TO 9:00 AM
INTERSECTION: N/S MARKETPLACE BLVD/TANGER BLVD
E/W BILL GARDNER PKWY

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
700-715	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
715-730	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	3
730-745	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2
745-800	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	3
800-815	1	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	5
815-830	0	0	1	0	0	3	0	0	0	0	0	0	0	3	0	0	7
830-845	0	0	0	0	1	2	0	0	0	1	1	0	0	0	0	0	5
845-900	1	0	0	0	0	3	0	0	0	1	2	0	0	1	0	0	8
HOUR TOTALS																	
700-800	0	0	0	0	2	2	0	0	0	2	1	0	0	2	0	0	9
715-815	1	0	0	0	2	2	0	0	0	4	2	0	0	2	0	0	13
730-830	1	0	1	0	2	4	0	0	0	4	1	0	0	4	0	0	17
745-845	1	0	1	0	2	6	0	0	0	4	2	0	0	4	0	0	20
800-900	2	0	1	0	1	8	0	0	0	5	4	0	0	4	0	0	25

AM PEAK HOUR
800-900
PEAK HOUR FACTOR
0.78



TRAFFIC DATA SERVICES

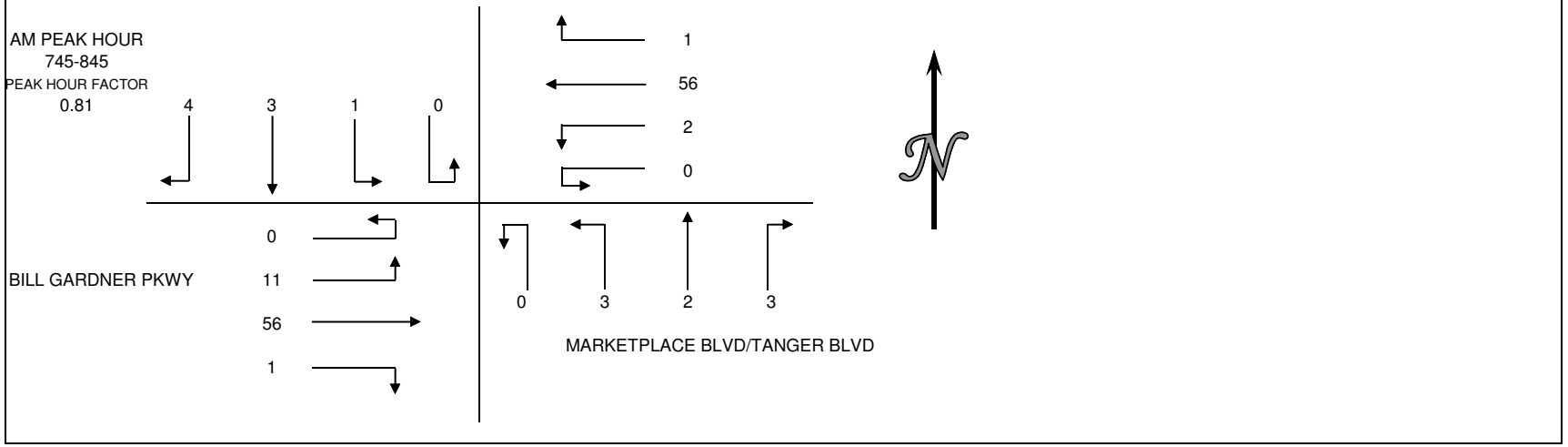
Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT HEAVY DUTY TRUCKS SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 7:00 AM TO 9:00 AM
INTERSECTION: N/S MARKETPLACE BLVD/TANGER BLVD
E/W BILL GARDNER PKWY

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
700-715	1	0	0	0	0	2	0	0	0	1	0	0	0	13	1	0	18
715-730	2	0	0	0	1	13	0	0	2	0	0	0	0	14	1	0	33
730-745	0	0	1	0	0	8	1	0	0	0	3	0	0	11	2	0	26
745-800	2	1	0	0	1	11	0	0	0	0	0	0	0	10	1	0	26
800-815	0	0	0	0	0	16	0	0	1	2	0	0	1	9	3	0	32
815-830	2	0	0	0	0	17	0	0	2	0	1	0	0	19	3	0	44
830-845	0	2	1	0	0	12	2	0	0	0	2	0	0	18	4	0	41
845-900	5	0	0	0	2	2	0	0	1	0	0	0	1	12	0	0	23
HOUR TOTALS																	
700-800	5	1	1	0	2	34	1	0	2	1	3	0	0	48	5	0	103
715-815	4	1	1	0	2	48	1	0	3	2	3	0	1	44	7	0	117
730-830	4	1	1	0	1	52	1	0	3	2	4	0	1	49	9	0	128
745-845	4	3	1	0	1	56	2	0	3	2	3	0	1	56	11	0	143
800-900	7	2	1	0	2	47	2	0	4	2	3	0	2	58	10	0	140



TRAFFIC DATA SERVICES

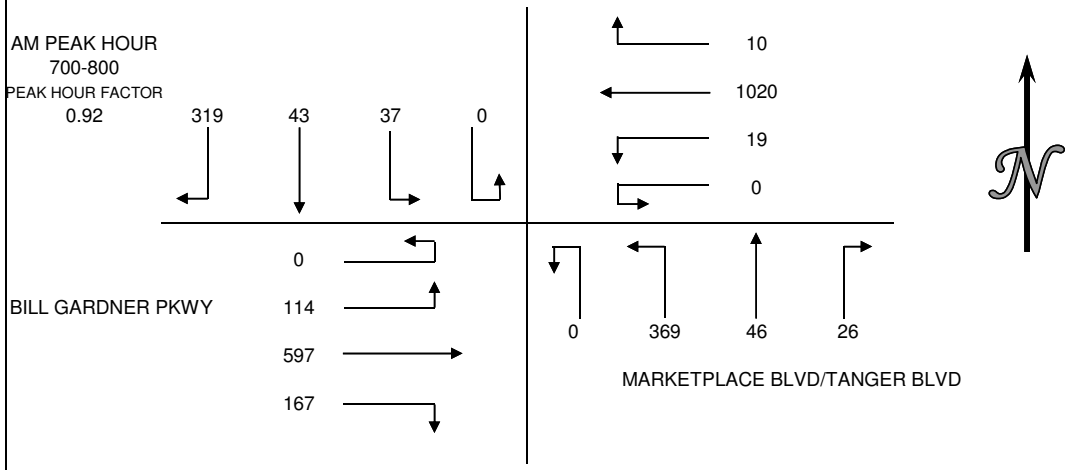
Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT ALL VEHICLES SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 7:00 AM TO 9:00 AM
INTERSECTION: N/S MARKETPLACE BLVD/TANGER BLVD
E/W BILL GARDNER PKWY

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
700-715	65	9	7	0	3	279	9	0	8	9	73	0	30	112	31	0	635
715-730	78	7	10	0	3	260	3	0	9	13	87	0	36	134	22	0	662
730-745	96	13	12	0	1	257	3	0	3	11	119	0	42	168	30	0	755
745-800	80	14	8	0	3	224	4	0	6	13	90	0	59	183	31	0	715
800-815	40	14	7	0	4	217	6	0	11	15	71	0	60	144	41	0	630
815-830	24	14	13	0	1	212	18	0	10	10	80	0	67	137	25	0	611
830-845	40	11	15	0	5	195	14	0	11	14	62	0	42	125	24	0	558
845-900	36	22	11	0	3	176	11	0	12	8	45	0	51	128	23	0	526
HOUR TOTALS																	
700-800	319	43	37	0	10	1020	19	0	26	46	369	0	167	597	114	0	2767
715-815	294	48	37	0	11	958	16	0	29	52	367	0	197	629	124	0	2762
730-830	240	55	40	0	9	910	31	0	30	49	360	0	228	632	127	0	2711
745-845	184	53	43	0	13	848	42	0	38	52	303	0	228	589	121	0	2514
800-900	140	61	46	0	13	800	49	0	44	47	258	0	220	534	113	0	2325



TRAFFIC DATA SERVICES

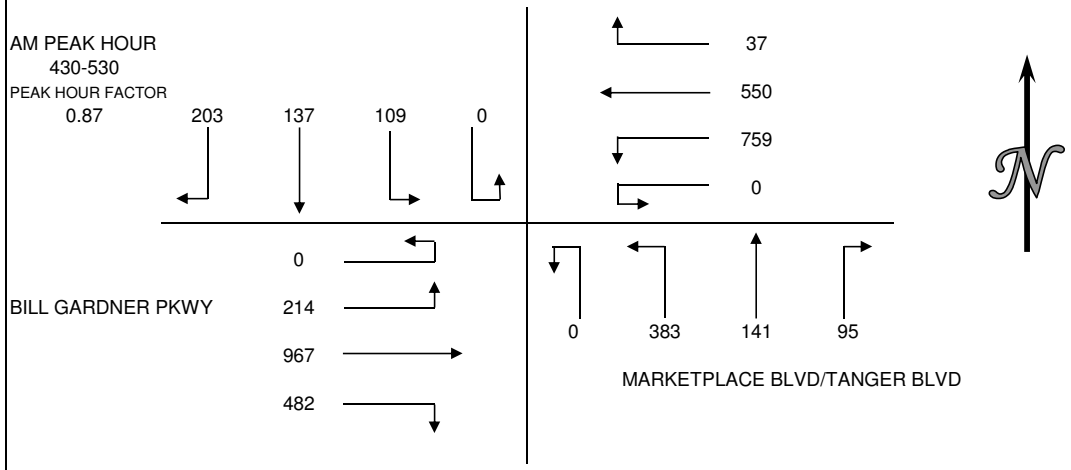
Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT CARS SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 4:00 PM TO 6:00 PM
INTERSECTION: N/S MARKETPLACE BLVD/TANGER BLVD
E/W BILL GARDNER PKWY

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
400-415	50	41	36	0	9	135	23	0	23	37	99	0	108	200	50	0	811
415-430	59	34	27	0	6	128	21	0	16	34	85	0	102	216	51	0	779
430-445	40	33	27	0	8	145	364	0	21	38	85	0	120	248	47	0	1176
445-500	51	42	22	0	8	148	148	0	22	30	98	0	121	236	53	0	979
500-515	55	30	31	0	12	125	125	0	28	42	99	0	108	253	59	0	967
515-530	57	32	29	0	9	132	122	0	24	31	101	0	133	230	55	0	955
530-545	56	28	35	0	14	127	127	0	21	31	117	0	106	235	51	0	948
545-600	34	29	24	0	12	102	102	0	20	27	96	0	131	219	59	0	855
HOUR TOTALS																	
400-500	200	150	112	0	31	556	556	0	82	139	367	0	451	900	201	0	3745
415-515	205	139	107	0	34	546	658	0	87	144	367	0	451	953	210	0	3901
430-530	203	137	109	0	37	550	759	0	95	141	383	0	482	967	214	0	4077
445-545	219	132	117	0	43	532	522	0	95	134	415	0	468	954	218	0	3849
500-600	202	119	119	0	47	486	476	0	93	131	413	0	478	937	224	0	3725



TRAFFIC DATA SERVICES

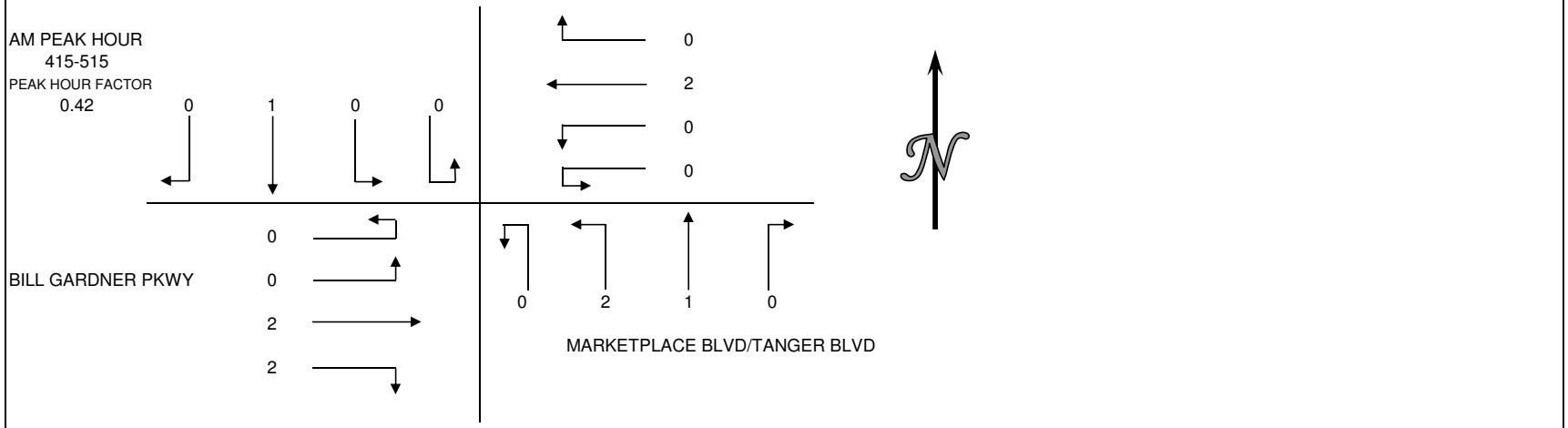
Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT SINGLE UNIT TRUCKS & BUSES SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 4:00 PM TO 6:00 PM
INTERSECTION: N/S MARKETPLACE BLVD/TANGER BLVD
E/W BILL GARDNER PKWY

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
400-415	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
415-430	0	1	0	0	0	2	0	0	0	0	1	0	2	0	0	0	6
430-445	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
445-500	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
500-515	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
515-530	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2
530-545	0	0	0	0	0	1	0	0	0	0	2	0	2	0	0	0	5
545-600	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
HOUR TOTALS																	
400-500	0	1	0	0	0	2	0	0	0	1	1	0	2	2	0	0	9
415-515	0	1	0	0	0	2	0	0	0	1	2	0	2	2	0	0	10
430-530	0	0	0	0	1	0	0	0	0	2	1	0	0	2	0	0	6
445-545	0	0	0	0	1	1	0	0	0	2	3	0	2	1	0	0	10
500-600	0	0	0	0	1	1	0	0	0	1	4	0	2	0	0	0	9



TRAFFIC DATA SERVICES

Phone: (678) 687-8266 Fax: (404) 294-6122

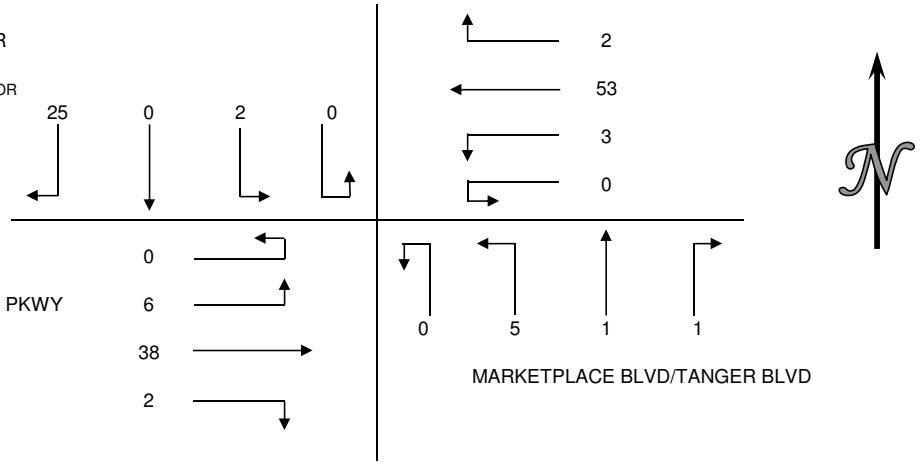
INTERSECTION TURNING MOVEMENT COUNT HEAVY DUTY TRUCKS SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 4:00 PM TO 6:00 PM
INTERSECTION: N/S MARKETPLACE BLVD/TANGER BLVD
E/W BILL GARDNER PKWY

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
400-415	7	0	2	0	0	7	1	0	0	0	2	0	0	11	1	0	31
415-430	7	0	0	0	0	14	0	0	0	1	0	0	0	13	2	0	37
430-445	6	0	0	0	1	19	0	0	1	0	1	0	2	6	1	0	37
445-500	5	0	0	0	1	13	2	0	0	0	2	0	0	8	2	0	33
500-515	6	0	0	0	0	8	0	0	0	0	0	0	0	7	2	0	23
515-530	6	0	0	0	5	12	1	0	3	0	0	0	0	5	0	0	32
530-545	5	0	1	0	2	8	0	0	0	0	2	0	3	13	4	0	38
545-600	6	0	1	0	3	10	4	0	0	1	0	0	1	3	2	0	31
HOUR TOTALS																	
400-500	25	0	2	0	2	53	3	0	1	1	5	0	2	38	6	0	138
415-515	24	0	0	0	2	54	2	0	1	1	3	0	2	34	7	0	130
430-530	23	0	0	0	7	52	3	0	4	0	3	0	2	26	5	0	125
445-545	22	0	1	0	8	41	3	0	3	0	4	0	3	33	8	0	126
500-600	23	0	2	0	10	38	5	0	3	1	2	0	4	28	8	0	124

AM PEAK HOUR
400-500
PEAK HOUR FACTOR
0.91



TRAFFIC DATA SERVICES

Phone: (678) 687-8266 Fax: (404) 294-6122

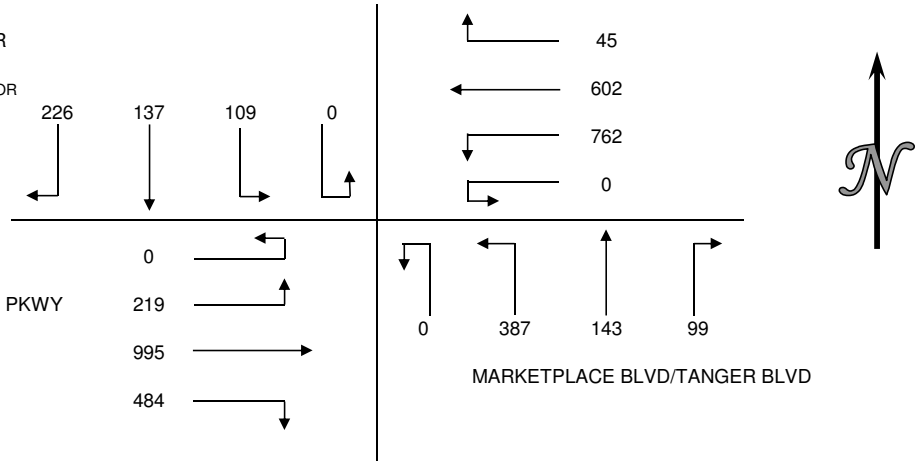
INTERSECTION TURNING MOVEMENT COUNT ALL VEHICLES SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 4:00 PM TO 6:00 PM
INTERSECTION: N/S MARKETPLACE BLVD/TANGER BLVD
E/W BILL GARDNER PKWY

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
400-415	57	41	38	0	9	142	24	0	23	37	101	0	108	211	51	0	842
415-430	66	35	27	0	6	144	21	0	16	35	86	0	104	229	53	0	822
430-445	46	33	27	0	9	164	364	0	22	38	86	0	122	255	48	0	1214
445-500	56	42	22	0	9	161	150	0	22	31	100	0	121	245	55	0	1014
500-515	61	30	31	0	12	133	125	0	28	42	100	0	108	260	61	0	991
515-530	63	32	29	0	15	144	123	0	27	32	101	0	133	235	55	0	989
530-545	61	28	36	0	16	136	127	0	21	31	121	0	111	248	55	0	991
545-600	40	29	25	0	15	112	106	0	20	28	97	0	132	222	61	0	887
HOUR TOTALS																	
400-500	225	151	114	0	33	611	559	0	83	141	373	0	455	940	207	0	3892
415-515	229	140	107	0	36	602	660	0	88	146	372	0	455	989	217	0	4041
430-530	226	137	109	0	45	602	762	0	99	143	387	0	484	995	219	0	4208
445-545	241	132	118	0	52	574	525	0	98	136	422	0	473	988	226	0	3985
500-600	225	119	121	0	58	525	481	0	96	133	419	0	484	965	232	0	3858

AM PEAK HOUR
430-530
PEAK HOUR FACTOR
0.87



TRAFFIC DATA SERVICES

NV5 TRAFFIC STUDY

HENRY COUNTY COUNTS (3121135)

SR 42/US 23 South of
Pine Grove Road

Site: #1
2/16/2022
Wednesday

Daily Classification

NB

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
12:00 AM	27	0	15	2	0	2	1	0	0	7	0	0	0	0
1:00 AM	18	0	12	4	0	0	0	0	0	2	0	0	0	0
2:00 AM	57	1	47	7	0	0	0	0	0	2	0	0	0	0
3:00 AM	46	0	30	9	0	2	0	0	0	5	0	0	0	0
4:00 AM	104	0	77	13	3	2	7	0	0	2	0	0	0	0
5:00 AM	203	2	132	36	2	11	14	0	2	4	0	0	0	0
6:00 AM	453	7	321	76	7	16	18	0	1	7	0	0	0	0
7:00 AM	627	3	421	119	15	37	13	0	7	12	0	0	0	0
8:00 AM	546	2	346	101	12	32	22	0	7	23	1	0	0	0
9:00 AM	413	3	246	84	8	32	24	0	7	9	0	0	0	0
10:00 AM	352	2	228	67	5	17	14	0	4	15	0	0	0	0
11:00 AM	398	3	231	83	9	36	15	0	6	15	0	0	0	0
12:00 PM	477	5	305	86	15	27	15	0	5	19	0	0	0	0
1:00 PM	481	5	332	74	13	24	17	0	10	6	0	0	0	0
2:00 PM	539	5	381	88	11	20	15	0	12	7	0	0	0	0
3:00 PM	534	7	388	73	16	25	11	0	6	7	1	0	0	0
4:00 PM	521	9	351	98	10	28	8	0	6	11	0	0	0	0
5:00 PM	560	5	410	92	9	26	3	0	8	7	0	0	0	0
6:00 PM	457	4	345	71	5	14	5	0	4	9	0	0	0	0
7:00 PM	427	3	334	61	3	7	3	0	1	15	0	0	0	0
8:00 PM	266	2	210	34	0	10	1	0	1	8	0	0	0	0
9:00 PM	179	1	153	20	0	3	0	0	0	2	0	0	0	0
10:00 PM	115	0	88	14	0	2	3	0	2	6	0	0	0	0
11:00 PM	60	0	48	7	0	3	0	0	0	2	0	0	0	0
Total	7860	69	5451	1319	143	376	209	0	89	202	2	0	0	0
%		0.9	69.4	16.8	1.8	4.8	2.7	0.0	1.1	2.6	0.0	0.0	0.0	0.0

TRAFFIC DATA SERVICES
NV5 TRAFFIC STUDY
HENRY COUNTY COUNTS (3121135)

SR 42/US 23 South of
Pine Grove Road

Site: #1
2/16/2022
Wednesday

Daily Classification

SB

Interval Start	Total	Motor Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
12:00 AM	54	0	49	3	0	1	0	0	1	0	0	0	0	0
1:00 AM	23	0	14	4	0	1	0	0	0	4	0	0	0	0
2:00 AM	40	0	32	4	1	0	1	0	0	2	0	0	0	0
3:00 AM	41	0	28	4	0	1	3	0	3	2	0	0	0	0
4:00 AM	102	0	72	12	0	4	11	0	2	1	0	0	0	0
5:00 AM	132	0	92	16	1	3	11	0	5	4	0	0	0	0
6:00 AM	205	3	128	40	7	6	14	0	2	5	0	0	0	0
7:00 AM	497	6	341	84	16	23	14	0	6	7	0	0	0	0
8:00 AM	375	1	243	58	6	21	20	0	10	16	0	0	0	0
9:00 AM	388	3	231	67	6	31	24	0	11	14	1	0	0	0
10:00 AM	413	4	256	74	7	31	18	0	11	12	0	0	0	0
11:00 AM	493	1	314	85	9	35	20	0	7	21	1	0	0	0
12:00 PM	516	4	322	96	21	29	15	0	13	16	0	0	0	0
1:00 PM	552	4	382	79	11	29	14	0	15	18	0	0	0	0
2:00 PM	531	4	377	76	7	35	14	0	8	10	0	0	0	0
3:00 PM	699	7	521	97	9	31	15	0	9	10	0	0	0	0
4:00 PM	740	6	529	127	10	32	17	0	10	9	0	0	0	0
5:00 PM	754	14	559	122	13	27	3	0	7	9	0	0	0	0
6:00 PM	524	4	411	74	5	16	3	0	4	7	0	0	0	0
7:00 PM	366	0	289	52	3	10	4	0	0	8	0	0	0	0
8:00 PM	260	1	214	34	1	7	0	0	0	3	0	0	0	0
9:00 PM	192	1	163	16	0	4	0	0	3	5	0	0	0	0
10:00 PM	112	0	95	11	0	2	1	0	0	3	0	0	0	0
11:00 PM	103	1	82	14	1	1	0	0	1	3	0	0	0	0
Total	8112	64	5744	1249	134	380	222	0	128	189	2	0	0	0
%		0.8	70.8	15.4	1.7	4.7	2.7	0.0	1.6	2.3	0.0	0.0	0.0	0.0

TRAFFIC DATA SERVICES

NV5 TRAFFIC STUDY

HENRY COUNTY COUNTS (3121135)

SR 42/US 23 South of
Pine Grove Road

Site: #1
2/16/2022
Wednesday

Daily Volume

Interval Start	NB		SB		Combined		Interval Start	NB		SB		Combined	
12:00 AM	5	27	19	54	24	81	12:00 PM	128	477	111	516	239	993
12:15 AM	10		22		32		12:15 PM	97		140		237	
12:30 AM	9		9		18		12:30 PM	111		126		237	
12:45 AM	3		4		7		12:45 PM	141		139		280	
1:00 AM	4	18	8	23	12	41	1:00 PM	126	481	147	552	273	1033
1:15 AM	5		5		10		1:15 PM	102		129		231	
1:30 AM	5		5		10		1:30 PM	130		132		262	
1:45 AM	4		5		9		1:45 PM	123		144		267	
2:00 AM	7	57	5	40	12	97	2:00 PM	129	539	134	531	263	1070
2:15 AM	9		11		20		2:15 PM	154		143		297	
2:30 AM	26		12		38		2:30 PM	140		116		256	
2:45 AM	15		12		27		2:45 PM	116		138		254	
3:00 AM	14	46	11	41	25	87	3:00 PM	108	534	153	699	261	1233
3:15 AM	13		9		22		3:15 PM	114		159		273	
3:30 AM	9		11		20		3:30 PM	156		192		348	
3:45 AM	10		10		20		3:45 PM	156		195		351	
4:00 AM	7	104	16	102	23	206	4:00 PM	142	521	173	740	315	1261
4:15 AM	24		14		38		4:15 PM	108		179		287	
4:30 AM	24		31		55		4:30 PM	141		205		346	
4:45 AM	49		41		90		4:45 PM	130		183		313	
5:00 AM	34	203	24	132	58	335	5:00 PM	130	560	185	754	315	1314
5:15 AM	34		31		65		5:15 PM	156		207		363	
5:30 AM	51		38		89		5:30 PM	144		169		313	
5:45 AM	84		39		123		5:45 PM	130		193		323	
6:00 AM	69	453	52	205	121	658	6:00 PM	137	457	155	524	292	981
6:15 AM	85		38		123		6:15 PM	116		136		252	
6:30 AM	136		55		191		6:30 PM	116		115		231	
6:45 AM	163		60		223		6:45 PM	88		118		206	
7:00 AM	125	627	107	497	232	1124	7:00 PM	131	427	106	366	237	793
7:15 AM	137		128		265		7:15 PM	98		84		182	
7:30 AM	177		155		332		7:30 PM	101		90		191	
7:45 AM	188		107		295		7:45 PM	97		86		183	
8:00 AM	178	546	107	375	285	921	8:00 PM	72	266	80	260	152	526
8:15 AM	137		99		236		8:15 PM	77		67		144	
8:30 AM	121		81		202		8:30 PM	61		66		127	
8:45 AM	110		88		198		8:45 PM	56		47		103	
9:00 AM	91	413	101	388	192	801	9:00 PM	62	179	51	192	113	371
9:15 AM	94		111		205		9:15 PM	47		57		104	
9:30 AM	116		92		208		9:30 PM	38		40		78	
9:45 AM	112		84		196		9:45 PM	32		44		76	
10:00 AM	82	352	103	413	185	765	10:00 PM	35	115	37	112	72	227
10:15 AM	95		128		223		10:15 PM	31		43		74	
10:30 AM	81		90		171		10:30 PM	29		17		46	
10:45 AM	94		92		186		10:45 PM	20		15		35	
11:00 AM	75	398	113	493	188	891	11:00 PM	28	60	27	103	55	163
11:15 AM	104		129		233		11:15 PM	15		34		49	
11:30 AM	116		113		229		11:30 PM	10		24		34	
11:45 AM	103		138		241		11:45 PM	7		18		25	

Volume Totals

	NB	SB	Combined
12:00 AM - 12:00 PM	3244 (54.0%)	2763 (46.0%)	6007
12:00 PM - 12:00 AM	4616 (46.3%)	5349 (53.7%)	9965
24 Hours	7860 (49.2%)	8112 (50.8%)	15972

Peak Hours

	NB	SB	Combined
12:00 AM - 12:00 PM	7:15 AM	7:00 AM	7:15 AM
Volume	680	497	1177
Factor	0.90	0.80	0.89
12:00 PM - 12:00 AM	3:15 PM	4:30 PM	4:30 PM
Volume	568	780	1337
Factor	0.91	0.94	0.92

APPENDIX D

HISTORIC TRAFFIC COUNT DATA

Single Station Annualized Statistics - 151-0334

Data Item	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Data Item
Statistics type	-	-	-	-	Actual	Estimated	Estimated	Estimated	Actual	**Estimated**	Statistics type
AADT	21500	21400	23100	23100	21900	22600	23900	23900	24600	**22600**	AADT
Single-Unit Truck AADT	-	-	-	-	824	851	-	-	-	**-**	Single-Unit Truck AADT
Combo-Unit Truck AADT	-	-	-	-	272	281	-	-	-	**-**	Combo-Unit Truck AADT
% Peak SU Trucks	-	-	-	-	0.178	0.178	-	-	-	**-**	% Peak SU Trucks
% Peak CU Trucks	-	-	-	-	0.032	0.032	-	-	-	**-**	% Peak CU Trucks
K-Factor	-	-	0.08	0.08	0.089	0.089	-	-	0.0794	**0.0794**	K-Factor
D-Factor	-	-	-	-	0.6	0.6	-	-	0.64	**0.64**	D-Factor
Future AADT	-	-	-	-	-	29700	31900	32000	31800	**31800**	Future AADT

Single Station Annualized Statistics - 151-0336

Data Item	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Data Item
Statistics type	-	-	-	-	Estimated	Actual	Estimated	Actual	Estimated	**Actual**	Statistics type
AADT	8500	11900	11900	14000	15100	14500	15300	15800	15900	**16300**	AADT
Single-Unit Truck AADT	-	-	-	-	-	436	-	-	-	**820**	Single-Unit Truck AADT
Combo-Unit Truck AADT	-	-	-	-	-	264	-	-	-	**349**	Combo-Unit Truck AADT
% Peak SU Trucks	-	-	-	-	0	0.124	-	-	-	**0.436**	% Peak SU Trucks
% Peak CU Trucks	-	-	-	-	0	0.117	-	-	-	**0.203**	% Peak CU Trucks
K-Factor	-	-	-	0.0997	0.0997	0.0985	-	0.1092	0.1092	**0.1111**	K-Factor
D-Factor	-	-	-	0.5	0.5	0.5	-	0.63	0.63	**0.55**	D-Factor
Future AADT	-	-	-	-	-	24500	29300	34900	34200	**34200**	Future AADT

Single Station Annualized Statistics - 151-0381

Data Item	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Data Item
Statistics type	-	-	-	-	Estimated	Estimated	Estimated	Estimated	Estimated	**Actual**	Statistics type
AADT	4960	4890	7680	7680	8260	8530	9030	9020	9080	**10400**	AADT
Single-Unit Truck AADT	-	-	255	255	255	263	-	-	-	**400**	Single-Unit Truck AADT
Combo-Unit Truck AADT	-	-	64	64	64	66	-	-	-	**103**	Combo-Unit Truck AADT
% Peak SU Trucks	-	-	-	-	0	0	-	-	-	**0.289**	% Peak SU Trucks
% Peak CU Trucks	-	-	-	-	0	0	-	-	-	**0.068**	% Peak CU Trucks
K-Factor	-	-	0.09	0.09	0.09	0.09	-	-	-	**0.1117**	K-Factor
D-Factor	-	-	0.5	0.5	0.5	0.5	-	-	-	**0.56**	D-Factor
Future AADT	-	-	-	-	-	13800	19100	20400	20500	**20500**	Future AADT

Single Station Annualized Statistics - 151-0383

Data Item	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Data Item
Statistics type	-	-	-	-	Actual	Estimated	Estimated	Actual	Estimated	**Estimated**	Statistics type
AADT	20200	19900	20300	20300	20800	21300	21700	23500	24000	**22300**	AADT
Single-Unit Truck AADT	-	-	-	-	-	-	-	-	-	**-**	Single-Unit Truck AADT
Combo-Unit Truck AADT	-	-	-	-	-	-	-	-	-	**-**	Combo-Unit Truck AADT
% Peak SU Trucks	-	-	-	-	0	0	-	-	-	**-**	% Peak SU Trucks
% Peak CU Trucks	-	-	-	-	0	0	-	-	-	**-**	% Peak CU Trucks
K-Factor	-	-	-	-	0.0838	0.0838	-	0.0782	0.0782	**0.0782**	K-Factor
D-Factor	-	-	-	-	0.6	0.6	-	0.65	0.65	**0.65**	D-Factor
Future AADT	-	-	-	-	-	24300	27300	29600	30200	**30200**	Future AADT

DRI 3506 Sansone Speculative Industrial Development - Growth Rates

Percentage Growth												
Roadway	**County**	**Traffic Count Station**	**2016 Traffic Volumes**	**2017 Traffic Volumes**	**2018 Traffic Volumes**	**2019 Traffic Volumes**	**2020 Traffic Volumes**	**2021 Traffic Volumes by Linear Regress.**	**2022 Traffic Volumes by Linear Regress.**	**2023 Traffic Volumes by Linear Regress.**	**Annual Growth 2021 to 2022**	**Annual Growth 2021 to 2023**
SR 42	Henry	151-0336	14,500	15,300	15,800	15,900	16,300	16,820	17,240	17,660	2.5%	2.5%
SR 42	Henry	151-0334	22,600	23,900	23,900	24,600	22,600	23,730	23,800	23,870	0.3%	0.3%
Bill Gardner Pkwy	Henry	151-0383	21,300	21,700	23,500	24,000	22,300	23,850	24,280	24,710	1.8%	1.8%
Bill Gardner Pkwy	Henry	129-0156	8,530	9,030	9,020	9,080	10,400	10,349	10,728	11,107	3.7%	3.7%
		Weighted Average	**66,930**	**69,930**	**72,220**	**73,580**	**71,600**	**74,749**	**76,048**	**77,347**	**1.7%**	**1.7%**

APPENDIX E

CAPACITY ANALYSIS REPORTS

Intersection	
Int Delay, s/veh	45.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	115	2	44	2	2	10	86	538	11	3	512	156
Future Vol, veh/h	115	2	44	2	2	10	86	538	11	3	512	156
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	-	-	150	-	-	200
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	0	0	50	50	90	33	6	1	2	6	73
Mvmt Flow	135	2	52	2	2	12	101	633	13	4	602	184

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1459	1458	602	1472	1445	633	602	0	0	646	0	0
Stage 1	610	610	-	835	835	-	-	-	-	-	-	-
Stage 2	849	848	-	637	610	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.5	6.2	7.6	7	7.1	4.43	-	-	4.12	-	-
Critical Hdwy Stg 1	6.13	5.5	-	6.6	6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.5	-	6.6	6	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4	3.3	3.95	4.45	4.11	2.497	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 107	131	503	82	105	353	841	-	-	939	-	-
Stage 1	480	488	-	301	323	-	-	-	-	-	-	-
Stage 2	354	380	-	394	417	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 86	106	503	62	85	353	841	-	-	939	-	-
Mov Cap-2 Maneuver	~ 86	106	-	62	85	-	-	-	-	-	-	-
Stage 1	390	484	-	244	262	-	-	-	-	-	-	-
Stage 2	275	309	-	349	414	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 413.2	29.1	1.3	0
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	841	-	-	112	166	939	-	-
HCM Lane V/C Ratio	0.12	-	-	1.691	0.099	0.004	-	-
HCM Control Delay (s)	9.9	0	-	$ 413.2	29.1	8.8	0	-
HCM Lane LOS	A	A	-	F	D	A	A	-
HCM 95th %tile Q(veh)	0.4	-	-	14.6	0.3	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	12	0	1	0	660	32	15	539	0
Future Vol, veh/h	0	0	0	12	0	1	0	660	32	15	539	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0	0	6	6	7	7	0
Mvmt Flow	0	0	0	14	0	1	0	767	37	17	627	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1447	1465	627	1447	1447	786	627	0	0	804	0	0
Stage 1	661	661	-	786	786	-	-	-	-	-	-	-
Stage 2	786	804	-	661	661	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.17	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.263	-	-
Pot Cap-1 Maneuver	110	129	487	110	133	395	965	-	-	799	-	-
Stage 1	455	463	-	388	406	-	-	-	-	-	-	-
Stage 2	388	398	-	455	463	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	107	125	487	107	129	395	965	-	-	799	-	-
Mov Cap-2 Maneuver	107	125	-	107	129	-	-	-	-	-	-	-
Stage 1	455	448	-	388	406	-	-	-	-	-	-	-
Stage 2	387	398	-	440	448	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	41.7	0	0.3
HCM LOS	A	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	965	-	-	-	113	799	-	-
HCM Lane V/C Ratio	-	-	-	-	0.134	0.022	-	-
HCM Control Delay (s)	0	-	-	0	41.7	9.6	0	-
HCM Lane LOS	A	-	-	A	E	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.4	0.1	-	-

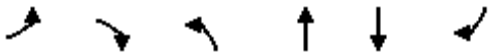
Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	149	15	16	549	266	388
Future Vol, veh/h	149	15	16	549	266	388
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	250	-	250	-	-	150
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	6	0	0	6	15	2
Mvmt Flow	175	18	19	646	313	456

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	997	313	313	0	-	0
Stage 1	313	-	-	-	-	-
Stage 2	684	-	-	-	-	-
Critical Hdwy	6.46	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.46	-	-	-	-	-
Critical Hdwy Stg 2	5.46	-	-	-	-	-
Follow-up Hdwy	3.554	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	266	732	1259	-	-	-
Stage 1	732	-	-	-	-	-
Stage 2	494	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	262	732	1259	-	-	-
Mov Cap-2 Maneuver	262	-	-	-	-	-
Stage 1	721	-	-	-	-	-
Stage 2	494	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	39.7	0.2	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1259	-	262	732	-	-
HCM Lane V/C Ratio	0.015	-	0.669	0.024	-	-
HCM Control Delay (s)	7.9	-	42.7	10	-	-
HCM Lane LOS	A	-	E	B	-	-
HCM 95th %tile Q(veh)	0	-	4.3	0.1	-	-



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	244	450	886	333	158	130
Future Volume (veh/h)	244	450	886	333	158	130
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1767	1826	1870	1841	1767	1544
Adj Flow Rate, veh/h	257	474	933	351	166	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	5	2	4	9	24
Cap, veh/h	508	467	891	1122	214	
Arrive On Green	0.30	0.30	0.44	0.61	0.12	0.00
Sat Flow, veh/h	1682	1547	1781	1841	1767	1309
Grp Volume(v), veh/h	257	474	933	351	166	0
Grp Sat Flow(s),veh/h/ln	1682	1547	1781	1841	1767	1309
Q Serve(g_s), s	14.2	34.0	50.0	10.4	10.3	0.0
Cycle Q Clear(g_c), s	14.2	34.0	50.0	10.4	10.3	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	508	467	891	1122	214	
V/C Ratio(X)	0.51	1.02	1.05	0.31	0.77	
Avail Cap(c_a), veh/h	508	467	891	1242	329	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.4	39.3	23.1	10.6	48.0	0.0
Incr Delay (d2), s/veh	0.8	45.5	43.1	0.2	6.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	18.4	29.1	3.8	4.7	0.0
Unsig. Movement Delay, s/veh						0.00
LnGrp Delay(d),s/veh	33.2	84.9	66.3	10.8	54.0	0.0
LnGrp LOS	C	F	F	B	D	A
Approach Vol, veh/h	731			1284	303	A
Approach Delay, s/veh	66.7			51.1	29.6	
Approach LOS	E			D	C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	55.0	18.7		39.0		73.7
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s	49.0	20.0		33.0		75.0
Max Q Clear Time (g_c+I1), s	52.0	12.3		36.0		12.4
Green Ext Time (p_c), s	0.0	0.4		0.0		2.1

Intersection Summary		
HCM 6th Ctrl Delay		53.2
HCM 6th LOS		D

Notes

Unsignalized Delay for [SBR] is included in calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	597	167	19	1020	10	369	46	26	37	43	319
Future Volume (veh/h)	114	597	167	19	1020	10	369	46	26	37	43	319
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1781	1900	1826	1841	1307	1885	1796	1781	1856	1870	1870
Adj Flow Rate, veh/h	124	649	0	21	1109	11	463	0	0	40	47	347
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	8	0	5	4	40	1	7	8	3	2	2
Cap, veh/h	222	1357		317	1287	13	569	285	0	402	426	361
Arrive On Green	0.07	0.40	0.00	0.03	0.36	0.36	0.16	0.00	0.00	0.23	0.23	0.23
Sat Flow, veh/h	1753	3385	1610	1739	3548	35	3591	1796	0	1767	1870	1585
Grp Volume(v), veh/h	124	649	0	21	547	573	463	0	0	40	47	347
Grp Sat Flow(s),veh/h/ln	1753	1692	1610	1739	1749	1834	1795	1796	0	1767	1870	1585
Q Serve(g_s), s	4.7	15.6	0.0	0.8	31.8	31.8	13.7	0.0	0.0	2.0	2.2	23.8
Cycle Q Clear(g_c), s	4.7	15.6	0.0	0.8	31.8	31.8	13.7	0.0	0.0	2.0	2.2	23.8
Prop In Lane	1.00		1.00	1.00		0.02	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	222	1357		317	634	666	569	285	0	402	426	361
V/C Ratio(X)	0.56	0.48		0.07	0.86	0.86	0.81	0.00	0.00	0.10	0.11	0.96
Avail Cap(c_a), veh/h	245	1480		358	717	752	687	344	0	402	426	361
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.9	24.4	0.0	21.0	32.4	32.4	44.6	0.0	0.0	33.5	33.6	41.9
Incr Delay (d2), s/veh	2.3	0.3	0.0	0.1	9.6	9.2	6.3	0.0	0.0	0.1	0.1	37.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	6.1	0.0	0.3	14.7	15.3	6.5	0.0	0.0	0.8	1.0	12.8
Unsig. Movement Delay, s/veh			0.00									
LnGrp Delay(d),s/veh	27.1	24.6	0.0	21.1	42.0	41.6	50.9	0.0	0.0	33.6	33.7	79.0
LnGrp LOS	C	C	A	C	D	D	D	A	A	C	C	E
Approach Vol, veh/h		955	A		1141			463			434	
Approach Delay, s/veh		20.3			41.4			50.9			69.9	
Approach LOS		C			D			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.5	44.8		30.0	8.4	49.0		22.4
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	8.0	44.0		24.0	5.0	47.0		20.0
Max Q Clear Time (g_c+I1), s	6.7	33.8		25.8	2.8	17.6		15.7
Green Ext Time (p_c), s	0.0	5.0		0.0	0.0	4.7		0.7

Intersection Summary	
HCM 6th Ctrl Delay	40.3
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR] is included in calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	29.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	110	0	54	0	2	2	59	595	1	1	717	167
Future Vol, veh/h	110	0	54	0	2	2	59	595	1	1	717	167
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	-	-	150	-	-	200
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	0	6	0	0	0	0	5	100	100	4	2
Mvmt Flow	116	0	57	0	2	2	62	626	1	1	755	176

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1510	1508	755	1536	1507	626	755	0	0	627	0	0
Stage 1	757	757	-	750	750	-	-	-	-	-	-	-
Stage 2	753	751	-	786	757	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.5	6.26	7.1	6.5	6.2	4.1	-	-	5.1	-	-
Critical Hdwy Stg 1	6.12	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4	3.354	3.5	4	3.3	2.2	-	-	3.1	-	-
Pot Cap-1 Maneuver	~ 99	122	402	96	122	488	865	-	-	618	-	-
Stage 1	400	419	-	407	422	-	-	-	-	-	-	-
Stage 2	402	421	-	388	419	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 89	108	402	75	108	488	865	-	-	618	-	-
Mov Cap-2 Maneuver	~ 89	108	-	75	108	-	-	-	-	-	-	-
Stage 1	356	418	-	362	376	-	-	-	-	-	-	-
Stage 2	354	375	-	332	418	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 304.4	25.8	0.9	0
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	865	-	-	120	177	618	-	-
HCM Lane V/C Ratio	0.072	-	-	1.439	0.024	0.002	-	-
HCM Control Delay (s)	9.5	0	-	$ 304.4	25.8	10.8	0	-
HCM Lane LOS	A	A	-	F	D	B	A	-
HCM 95th %tile Q(veh)	0.2	-	-	12	0.1	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	0	9	0	21	0	611	8	2	814	0
Future Vol, veh/h	0	0	0	9	0	21	0	611	8	2	814	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	10	0	4	13	0	4	0
Mvmt Flow	0	0	0	10	0	23	0	664	9	2	885	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1569	1562	885	1558	1558	669	885	0	0	673	0	0
Stage 1	889	889	-	669	669	-	-	-	-	-	-	-
Stage 2	680	673	-	889	889	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.3	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.39	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	91	113	347	92	114	444	773	-	-	927	-	-
Stage 1	341	364	-	450	459	-	-	-	-	-	-	-
Stage 2	444	457	-	341	364	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	86	113	347	92	114	444	773	-	-	927	-	-
Mov Cap-2 Maneuver	86	113	-	92	114	-	-	-	-	-	-	-
Stage 1	341	363	-	450	459	-	-	-	-	-	-	-
Stage 2	421	457	-	340	363	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	25.6	0	0
HCM LOS	A	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	773	-	-	-	207	927	-	-
HCM Lane V/C Ratio	-	-	-	-	0.158	0.002	-	-
HCM Control Delay (s)	0	-	-	0	25.6	8.9	0	-
HCM Lane LOS	A	-	-	A	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.5	0	-	-

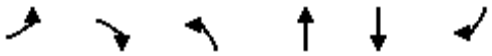
Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	126	52	43	476	458	371
Future Vol, veh/h	126	52	43	476	458	371
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	250	-	250	-	-	150
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	2	2	5	5	4
Mvmt Flow	131	54	45	496	477	386

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1063	477	477	0	-	0
Stage 1	477	-	-	-	-	-
Stage 2	586	-	-	-	-	-
Critical Hdwy	6.41	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	248	588	1085	-	-	-
Stage 1	626	-	-	-	-	-
Stage 2	558	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	238	588	1085	-	-	-
Mov Cap-2 Maneuver	238	-	-	-	-	-
Stage 1	600	-	-	-	-	-
Stage 2	558	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	29.8	0.7	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1085	-	238	588	-	-
HCM Lane V/C Ratio	0.041	-	0.551	0.092	-	-
HCM Control Delay (s)	8.5	-	37.3	11.7	-	-
HCM Lane LOS	A	-	E	B	-	-
HCM 95th %tile Q(veh)	0.1	-	3	0.3	-	-



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	275	766	566	260	322	163
Future Volume (veh/h)	275	766	566	260	322	163
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1767	1885	1856	1841	1870	1589
Adj Flow Rate, veh/h	284	790	584	268	332	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	9	1	3	4	2	21
Cap, veh/h	661	628	577	957	384	
Arrive On Green	0.39	0.39	0.27	0.52	0.21	0.00
Sat Flow, veh/h	1682	1598	1767	1841	1870	1346
Grp Volume(v), veh/h	284	790	584	268	332	0
Grp Sat Flow(s),veh/h/ln	1682	1598	1767	1841	1870	1346
Q Serve(g_s), s	14.1	45.0	31.0	9.4	19.6	0.0
Cycle Q Clear(g_c), s	14.1	45.0	31.0	9.4	19.6	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	661	628	577	957	384	
V/C Ratio(X)	0.43	1.26	1.01	0.28	0.86	
Avail Cap(c_a), veh/h	661	628	577	1045	474	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.4	34.8	29.1	15.5	44.0	0.0
Incr Delay (d2), s/veh	0.4	129.0	40.7	0.2	13.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	39.2	18.7	3.7	10.1	0.0
Unsig. Movement Delay, s/veh						0.00
LnGrp Delay(d),s/veh	25.8	163.7	69.9	15.6	57.0	0.0
LnGrp LOS	C	F	F	B	E	A
Approach Vol, veh/h	1074			852	500	A
Approach Delay, s/veh	127.3			52.8	37.8	
Approach LOS	F			D	D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	36.0	28.5		50.0		64.5
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s	30.0	28.0		44.0		64.0
Max Q Clear Time (g_c+I1), s	33.0	21.6		47.0		11.4
Green Ext Time (p_c), s	0.0	0.9		0.0		1.5

Intersection Summary	
HCM 6th Ctrl Delay	82.7
HCM 6th LOS	F

Notes

Unsignalized Delay for [SBR] is included in calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	995	484	762	602	45	387	143	99	109	137	226
Future Volume (veh/h)	219	995	484	762	602	45	387	143	99	109	137	226
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1900	1900	1767	1633	1885	1885	1841	1900	1900	1752
Adj Flow Rate, veh/h	252	1144	0	876	692	52	362	281	114	125	157	260
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	3	0	0	9	18	1	1	4	0	0	10
Cap, veh/h	455	940		591	1409	106	311	221	90	229	241	188
Arrive On Green	0.12	0.27	0.00	0.30	0.45	0.45	0.17	0.17	0.17	0.13	0.13	0.13
Sat Flow, veh/h	1781	3526	1610	1810	3165	238	1795	1275	517	1810	1900	1485
Grp Volume(v), veh/h	252	1144	0	876	367	377	362	0	395	125	157	260
Grp Sat Flow(s),veh/h/ln	1781	1763	1610	1810	1678	1724	1795	0	1792	1810	1900	1485
Q Serve(g_s), s	15.1	40.0	0.0	45.0	23.3	23.3	26.0	0.0	26.0	9.7	11.8	19.0
Cycle Q Clear(g_c), s	15.1	40.0	0.0	45.0	23.3	23.3	26.0	0.0	26.0	9.7	11.8	19.0
Prop In Lane	1.00		1.00	1.00		0.14	1.00		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	455	940		591	747	768	311	0	311	229	241	188
V/C Ratio(X)	0.55	1.22		1.48	0.49	0.49	1.16	0.00	1.27	0.55	0.65	1.38
Avail Cap(c_a), veh/h	465	940		591	747	768	311	0	311	229	241	188
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.7	55.0	0.0	45.6	29.5	29.5	62.0	0.0	62.0	61.4	62.4	65.5
Incr Delay (d2), s/veh	1.4	107.3	0.0	226.2	0.5	0.5	102.9	0.0	145.1	2.7	6.1	201.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	31.6	0.0	58.0	9.5	9.8	20.7	0.0	24.3	4.6	6.1	17.7
Unsig. Movement Delay, s/veh			0.00									
LnGrp Delay(d),s/veh	34.1	162.3	0.0	271.7	30.0	30.0	164.9	0.0	207.1	64.1	68.5	267.2
LnGrp LOS	C	F	A	F	C	C	F	A	F	E	E	F
Approach Vol, veh/h		1952	A		1620			757			542	
Approach Delay, s/veh		99.5			160.7			186.9			162.8	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	23.2	71.8		24.0	50.0	45.0		31.0
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	18.0	65.0		18.0	44.0	39.0		25.0
Max Q Clear Time (g_c+I1), s	17.1	25.3		21.0	47.0	42.0		28.0
Green Ext Time (p_c), s	0.1	5.2		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	140.5
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR] is included in calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	54.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↰	↱		↰	↱
Traffic Vol, veh/h	118	2	45	2	2	10	88	550	11	3	523	159
Future Vol, veh/h	118	2	45	2	2	10	88	550	11	3	523	159
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	-	-	150	-	-	200
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	0	0	50	50	90	33	6	1	2	6	73
Mvmt Flow	139	2	53	2	2	12	104	647	13	4	615	187

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1492	1491	615	1506	1478	647	615	0	0	660	0	0
Stage 1	623	623	-	855	855	-	-	-	-	-	-	-
Stage 2	869	868	-	651	623	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.5	6.2	7.6	7	7.1	4.43	-	-	4.12	-	-
Critical Hdwy Stg 1	6.13	5.5	-	6.6	6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.5	-	6.6	6	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4	3.3	3.95	4.45	4.11	2.497	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 101	125	495	78	99	346	831	-	-	928	-	-
Stage 1	472	481	-	293	315	-	-	-	-	-	-	-
Stage 2	345	372	-	387	411	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 80	100	495	58	79	346	831	-	-	928	-	-
Mov Cap-2 Maneuver	~ 80	100	-	58	79	-	-	-	-	-	-	-
Stage 1	379	477	-	235	253	-	-	-	-	-	-	-
Stage 2	265	298	-	341	408	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 493.6	30.4	1.3	0
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	831	-	-	104	158	928	-	-
HCM Lane V/C Ratio	0.125	-	-	1.867	0.104	0.004	-	-
HCM Control Delay (s)	9.9	0	-	$ 493.6	30.4	8.9	0	-
HCM Lane LOS	A	A	-	F	D	A	A	-
HCM 95th %tile Q(veh)	0.4	-	-	15.9	0.3	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

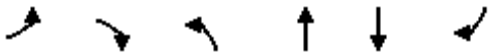
Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	0	12	0	1	0	675	33	15	551	0
Future Vol, veh/h	0	0	0	12	0	1	0	675	33	15	551	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0	0	6	6	7	7	0
Mvmt Flow	0	0	0	14	0	1	0	785	38	17	641	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1480	1498	641	1479	1479	804	641	0	0	823	0	0
Stage 1	675	675	-	804	804	-	-	-	-	-	-	-
Stage 2	805	823	-	675	675	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.17	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.263	-	-
Pot Cap-1 Maneuver	105	124	478	105	127	386	953	-	-	785	-	-
Stage 1	447	456	-	380	398	-	-	-	-	-	-	-
Stage 2	379	391	-	447	456	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	102	120	478	102	123	386	953	-	-	785	-	-
Mov Cap-2 Maneuver	102	120	-	102	123	-	-	-	-	-	-	-
Stage 1	447	440	-	380	398	-	-	-	-	-	-	-
Stage 2	378	391	-	432	440	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	43.7	0	0.3
HCM LOS	A	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	953	-	-	-	108	785	-	-
HCM Lane V/C Ratio	-	-	-	-	0.14	0.022	-	-
HCM Control Delay (s)	0	-	-	0	43.7	9.7	0	-
HCM Lane LOS	A	-	-	A	E	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.5	0.1	-	-



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	152	15	16	561	272	397
Future Volume (veh/h)	152	15	16	561	272	397
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1811	1900	1900	1811	1678	1870
Adj Flow Rate, veh/h	179	18	19	660	320	467
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	6	0	0	6	15	2
Cap, veh/h	300	280	503	920	852	805
Arrive On Green	0.17	0.17	0.51	0.51	0.51	0.51
Sat Flow, veh/h	1725	1610	699	1811	1678	1585
Grp Volume(v), veh/h	179	18	19	660	320	467
Grp Sat Flow(s),veh/h/ln	1725	1610	699	1811	1678	1585
Q Serve(g_s), s	3.0	0.3	0.5	8.9	3.6	6.5
Cycle Q Clear(g_c), s	3.0	0.3	4.2	8.9	3.6	6.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	300	280	503	920	852	805
V/C Ratio(X)	0.60	0.06	0.04	0.72	0.38	0.58
Avail Cap(c_a), veh/h	1043	974	838	1787	1655	1564
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.0	10.8	6.0	6.0	4.7	5.4
Incr Delay (d2), s/veh	1.9	0.1	0.0	1.1	0.3	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.1	0.0	1.0	0.3	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.9	10.9	6.0	7.0	5.0	6.1
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	197			679	787	
Approach Delay, s/veh	13.6			7.0	5.6	
Approach LOS	B			A	A	

Timer - Assigned Phs	2				6	8
Phs Duration (G+Y+Rc), s	21.0				21.0	10.5
Change Period (Y+Rc), s	6.0				6.0	6.0
Max Green Setting (Gmax), s	30.0				30.0	18.0
Max Q Clear Time (g_c+I1), s	8.5				10.9	5.0
Green Ext Time (p_c), s	3.4				4.1	0.4

Intersection Summary	
HCM 6th Ctrl Delay	7.1
HCM 6th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	249	460	905	340	161	133
Future Volume (veh/h)	249	460	905	340	161	133
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1767	1826	1870	1841	1767	1544
Adj Flow Rate, veh/h	262	484	953	358	169	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	5	2	4	9	24
Cap, veh/h	507	466	890	1123	217	
Arrive On Green	0.30	0.30	0.44	0.61	0.12	0.00
Sat Flow, veh/h	1682	1547	1781	1841	1767	1309
Grp Volume(v), veh/h	262	484	953	358	169	0
Grp Sat Flow(s),veh/h/ln	1682	1547	1781	1841	1767	1309
Q Serve(g_s), s	14.5	34.0	50.0	10.6	10.5	0.0
Cycle Q Clear(g_c), s	14.5	34.0	50.0	10.6	10.5	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	507	466	890	1123	217	
V/C Ratio(X)	0.52	1.04	1.07	0.32	0.78	
Avail Cap(c_a), veh/h	507	466	890	1239	329	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.6	39.4	23.2	10.6	48.0	0.0
Incr Delay (d2), s/veh	0.9	52.0	51.2	0.2	6.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	19.3	31.1	3.9	4.9	0.0
Unsig. Movement Delay, s/veh						0.00
LnGrp Delay(d),s/veh	33.6	91.5	74.4	10.8	54.5	0.0
LnGrp LOS	C	F	F	B	D	A
Approach Vol, veh/h	746			1311	309	A
Approach Delay, s/veh	71.1			57.0	29.8	
Approach LOS	E			E	C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	55.0	18.9		39.0		73.9
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s	49.0	20.0		33.0		75.0
Max Q Clear Time (g_c+I1), s	52.0	12.5		36.0		12.6
Green Ext Time (p_c), s	0.0	0.4		0.0		2.1

Intersection Summary	
HCM 6th Ctrl Delay	57.9
HCM 6th LOS	E

Notes

Unsignalized Delay for [SBR] is included in calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	610	171	19	1042	10	377	47	27	38	44	326
Future Volume (veh/h)	117	610	171	19	1042	10	377	47	27	38	44	326
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1781	1900	1826	1841	1307	1885	1796	1781	1856	1870	1870
Adj Flow Rate, veh/h	127	663	0	21	1133	11	473	0	0	41	48	354
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	8	0	5	4	40	1	7	8	3	2	2
Cap, veh/h	219	1371		314	1300	13	576	288	0	397	420	356
Arrive On Green	0.07	0.40	0.00	0.03	0.37	0.37	0.16	0.00	0.00	0.22	0.22	0.22
Sat Flow, veh/h	1753	3385	1610	1739	3549	34	3591	1796	0	1767	1870	1585
Grp Volume(v), veh/h	127	663	0	21	558	586	473	0	0	41	48	354
Grp Sat Flow(s),veh/h/ln	1753	1692	1610	1739	1749	1835	1795	1796	0	1767	1870	1585
Q Serve(g_s), s	4.8	16.1	0.0	0.8	33.1	33.1	14.2	0.0	0.0	2.1	2.3	24.8
Cycle Q Clear(g_c), s	4.8	16.1	0.0	0.8	33.1	33.1	14.2	0.0	0.0	2.1	2.3	24.8
Prop In Lane	1.00		1.00	1.00		0.02	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	219	1371		314	640	672	576	288	0	397	420	356
V/C Ratio(X)	0.58	0.48		0.07	0.87	0.87	0.82	0.00	0.00	0.10	0.11	0.99
Avail Cap(c_a), veh/h	240	1459		354	707	741	677	339	0	397	420	356
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.3	24.5	0.0	21.2	32.8	32.9	45.2	0.0	0.0	34.3	34.4	43.1
Incr Delay (d2), s/veh	2.9	0.3	0.0	0.1	10.8	10.4	7.0	0.0	0.0	0.1	0.1	46.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	6.4	0.0	0.3	15.4	16.1	6.8	0.0	0.0	0.9	1.0	14.1
Unsig. Movement Delay, s/veh			0.00									
LnGrp Delay(d),s/veh	28.2	24.8	0.0	21.2	43.6	43.2	52.2	0.0	0.0	34.4	34.5	89.3
LnGrp LOS	C	C	A	C	D	D	D	A	A	C	C	F
Approach Vol, veh/h		976	A		1165			473			443	
Approach Delay, s/veh		20.5			43.0			52.2			78.3	
Approach LOS		C			D			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.7	45.8		30.0	8.4	50.1		22.9
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	8.0	44.0		24.0	5.0	47.0		20.0
Max Q Clear Time (g_c+I1), s	6.8	35.1		26.8	2.8	18.1		16.2
Green Ext Time (p_c), s	0.0	4.7		0.0	0.0	4.8		0.7

Intersection Summary	
HCM 6th Ctrl Delay	42.4
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR] is included in calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	34.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	112	0	55	0	2	2	60	608	1	1	733	171
Future Vol, veh/h	112	0	55	0	2	2	60	608	1	1	733	171
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	-	-	150	-	-	200
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	0	6	0	0	0	0	5	100	100	4	2
Mvmt Flow	118	0	58	0	2	2	63	640	1	1	772	180

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1543	1541	772	1569	1540	640	772	0	0	641	0	0
Stage 1	774	774	-	766	766	-	-	-	-	-	-	-
Stage 2	769	767	-	803	774	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.5	6.26	7.1	6.5	6.2	4.1	-	-	5.1	-	-
Critical Hdwy Stg 1	6.12	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4	3.354	3.5	4	3.3	2.2	-	-	3.1	-	-
Pot Cap-1 Maneuver	~ 94	116	393	91	117	479	852	-	-	609	-	-
Stage 1	391	411	-	398	415	-	-	-	-	-	-	-
Stage 2	394	414	-	380	411	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 84	102	393	71	103	479	852	-	-	609	-	-
Mov Cap-2 Maneuver	~ 84	102	-	71	103	-	-	-	-	-	-	-
Stage 1	346	409	-	352	367	-	-	-	-	-	-	-
Stage 2	345	366	-	323	409	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 356.6	26.7	0.9	0
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	852	-	-	113	170	609	-	-
HCM Lane V/C Ratio	0.074	-	-	1.556	0.025	0.002	-	-
HCM Control Delay (s)	9.6	0	-	$ 356.6	26.7	10.9	0	-
HCM Lane LOS	A	A	-	F	D	B	A	-
HCM 95th %tile Q(veh)	0.2	-	-	12.9	0.1	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

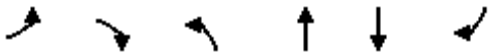
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	9	0	21	0	624	8	2	832	0
Future Vol, veh/h	0	0	0	9	0	21	0	624	8	2	832	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	10	0	4	13	0	4	0
Mvmt Flow	0	0	0	10	0	23	0	678	9	2	904	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1602	1595	904	1591	1591	683	904	0	0	687	0	0
Stage 1	908	908	-	683	683	-	-	-	-	-	-	-
Stage 2	694	687	-	908	908	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.3	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.39	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	86	108	338	88	108	436	761	-	-	916	-	-
Stage 1	332	357	-	442	452	-	-	-	-	-	-	-
Stage 2	436	450	-	332	357	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	81	108	338	88	108	436	761	-	-	916	-	-
Mov Cap-2 Maneuver	81	108	-	88	108	-	-	-	-	-	-	-
Stage 1	332	356	-	442	452	-	-	-	-	-	-	-
Stage 2	413	450	-	331	356	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	26.6	0	0
HCM LOS	A	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	761	-	-	-	199	916	-	-
HCM Lane V/C Ratio	-	-	-	-	0.164	0.002	-	-
HCM Control Delay (s)	0	-	-	0	26.6	8.9	0	-
HCM Lane LOS	A	-	-	A	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.6	0	-	-



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	129	53	44	486	468	379
Future Volume (veh/h)	129	53	44	486	468	379
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1870	1870	1826	1826	1841
Adj Flow Rate, veh/h	134	55	46	506	488	395
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	2	2	5	5	4
Cap, veh/h	310	273	432	863	863	737
Arrive On Green	0.17	0.17	0.47	0.47	0.47	0.47
Sat Flow, veh/h	1795	1585	629	1826	1826	1560
Grp Volume(v), veh/h	134	55	46	506	488	395
Grp Sat Flow(s),veh/h/ln	1795	1585	629	1826	1826	1560
Q Serve(g_s), s	1.9	0.8	1.6	5.7	5.4	5.0
Cycle Q Clear(g_c), s	1.9	0.8	7.0	5.7	5.4	5.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	310	273	432	863	863	737
V/C Ratio(X)	0.43	0.20	0.11	0.59	0.57	0.54
Avail Cap(c_a), veh/h	1211	1069	827	2009	2009	1717
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.4	10.0	7.9	5.4	5.3	5.2
Incr Delay (d2), s/veh	1.0	0.4	0.1	0.6	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.2	0.1	0.6	0.5	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.4	10.3	8.0	6.1	5.9	5.9
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	189			552	883	
Approach Delay, s/veh	11.1			6.2	5.9	
Approach LOS	B			A	A	

Timer - Assigned Phs	2				6	8
Phs Duration (G+Y+Rc), s	18.3				18.3	9.9
Change Period (Y+Rc), s	6.0				6.0	6.0
Max Green Setting (Gmax), s	30.0				30.0	18.0
Max Q Clear Time (g_c+I1), s	7.4				9.0	3.9
Green Ext Time (p_c), s	4.3				3.3	0.4

Intersection Summary	
HCM 6th Ctrl Delay	6.6
HCM 6th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	281	783	578	266	329	167
Future Volume (veh/h)	281	783	578	266	329	167
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1767	1885	1856	1841	1870	1589
Adj Flow Rate, veh/h	290	807	596	274	339	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	9	1	3	4	2	21
Cap, veh/h	658	625	574	960	391	
Arrive On Green	0.39	0.39	0.27	0.52	0.21	0.00
Sat Flow, veh/h	1682	1598	1767	1841	1870	1346
Grp Volume(v), veh/h	290	807	596	274	339	0
Grp Sat Flow(s),veh/h/ln	1682	1598	1767	1841	1870	1346
Q Serve(g_s), s	14.6	45.0	31.0	9.6	20.1	0.0
Cycle Q Clear(g_c), s	14.6	45.0	31.0	9.6	20.1	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	658	625	574	960	391	
V/C Ratio(X)	0.44	1.29	1.04	0.29	0.87	
Avail Cap(c_a), veh/h	658	625	574	1040	472	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.7	35.0	29.4	15.5	44.0	0.0
Incr Delay (d2), s/veh	0.5	142.7	48.0	0.2	13.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	41.6	19.8	3.8	10.5	0.0
Unsig. Movement Delay, s/veh						0.00
LnGrp Delay(d),s/veh	26.2	177.7	77.5	15.6	57.7	0.0
LnGrp LOS	C	F	F	B	E	A
Approach Vol, veh/h	1097			870	511	A
Approach Delay, s/veh	137.7			58.0	38.3	
Approach LOS	F			E	D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	36.0	29.0		50.0		65.0
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s	30.0	28.0		44.0		64.0
Max Q Clear Time (g_c+I1), s	33.0	22.1		47.0		11.6
Green Ext Time (p_c), s	0.0	0.9		0.0		1.5

Intersection Summary	
HCM 6th Ctrl Delay	89.2
HCM 6th LOS	F

Notes

Unsignalized Delay for [SBR] is included in calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	224	1017	495	779	615	46	396	146	101	111	140	231
Future Volume (veh/h)	224	1017	495	779	615	46	396	146	101	111	140	231
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1900	1900	1767	1633	1885	1885	1841	1900	1900	1752
Adj Flow Rate, veh/h	257	1169	0	895	707	53	370	288	116	128	161	266
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	3	0	0	9	18	1	1	4	0	0	10
Cap, veh/h	456	940		591	1404	105	311	221	89	229	241	188
Arrive On Green	0.12	0.27	0.00	0.30	0.44	0.44	0.17	0.17	0.17	0.13	0.13	0.13
Sat Flow, veh/h	1781	3526	1610	1810	3165	237	1795	1278	515	1810	1900	1485
Grp Volume(v), veh/h	257	1169	0	895	375	385	370	0	404	128	161	266
Grp Sat Flow(s),veh/h/ln	1781	1763	1610	1810	1678	1724	1795	0	1793	1810	1900	1485
Q Serve(g_s), s	15.4	40.0	0.0	45.0	24.0	24.0	26.0	0.0	26.0	10.0	12.1	19.0
Cycle Q Clear(g_c), s	15.4	40.0	0.0	45.0	24.0	24.0	26.0	0.0	26.0	10.0	12.1	19.0
Prop In Lane	1.00		1.00	1.00		0.14	1.00		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	456	940		591	744	765	311	0	311	229	241	188
V/C Ratio(X)	0.56	1.24		1.51	0.50	0.50	1.19	0.00	1.30	0.56	0.67	1.41
Avail Cap(c_a), veh/h	462	940		591	744	765	311	0	311	229	241	188
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.6	55.0	0.0	45.6	29.9	29.9	62.0	0.0	62.0	61.6	62.5	65.5
Incr Delay (d2), s/veh	1.5	118.6	0.0	240.3	0.5	0.5	112.5	0.0	156.7	3.0	6.9	214.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	33.1	0.0	60.3	9.8	10.1	21.5	0.0	25.3	4.8	6.3	18.4
Unsig. Movement Delay, s/veh			0.00									
LnGrp Delay(d),s/veh	34.2	173.6	0.0	285.8	30.4	30.4	174.5	0.0	218.7	64.6	69.4	280.4
LnGrp LOS	C	F	A	F	C	C	F	A	F	E	E	F
Approach Vol, veh/h		1995	A		1655			774			555	
Approach Delay, s/veh		106.1			168.6			197.6			169.4	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	23.5	71.5		24.0	50.0	45.0		31.0
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	18.0	65.0		18.0	44.0	39.0		25.0
Max Q Clear Time (g_c+I1), s	17.4	26.0		21.0	47.0	42.0		28.0
Green Ext Time (p_c), s	0.0	5.3		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	148.1
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR] is included in calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	60.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	118	2	54	2	2	10	90	554	11	3	534	159
Future Vol, veh/h	118	2	54	2	2	10	90	554	11	3	534	159
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	-	-	150	-	-	200
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	0	0	50	50	90	33	6	1	2	6	73
Mvmt Flow	139	2	64	2	2	12	106	652	13	4	628	187

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1514	1513	628	1533	1500	652	628	0	0	665	0	0
Stage 1	636	636	-	864	864	-	-	-	-	-	-	-
Stage 2	878	877	-	669	636	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.5	6.2	7.6	7	7.1	4.43	-	-	4.12	-	-
Critical Hdwy Stg 1	6.13	5.5	-	6.6	6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.5	-	6.6	6	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4	3.3	3.95	4.45	4.11	2.497	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 98	121	487	74	96	343	821	-	-	924	-	-
Stage 1	464	475	-	289	312	-	-	-	-	-	-	-
Stage 2	341	369	-	377	405	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 77	95	487	53	76	343	821	-	-	924	-	-
Mov Cap-2 Maneuver	~ 77	95	-	53	76	-	-	-	-	-	-	-
Stage 1	369	471	-	230	248	-	-	-	-	-	-	-
Stage 2	259	293	-	324	402	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s$	528.1	31.9	1.4	0
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	821	-	-	105	150	924	-	-
HCM Lane V/C Ratio	0.129	-	-	1.95	0.11	0.004	-	-
HCM Control Delay (s)	10	0	-	$ 528.1	31.9	8.9	0	-
HCM Lane LOS	B	A	-	F	D	A	A	-
HCM 95th %tile Q(veh)	0.4	-	-	17	0.4	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

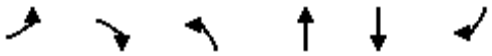
Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	1	23	12	4	1	75	675	33	15	551	20
Future Vol, veh/h	6	1	23	12	4	1	75	675	33	15	551	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	None	-	-	None	-	-	Yield
Storage Length	150	-	-	-	-	-	310	-	-	-	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0	0	6	6	7	7	0
Mvmt Flow	7	1	27	14	5	1	87	785	38	17	641	23

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1656	1672	641	1654	1653	804	641	0	0	823	0	0
Stage 1	675	675	-	978	978	-	-	-	-	-	-	-
Stage 2	981	997	-	676	675	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.17	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.263	-	-
Pot Cap-1 Maneuver	79	97	478	79	99	386	953	-	-	785	-	-
Stage 1	447	456	-	304	331	-	-	-	-	-	-	-
Stage 2	303	325	-	446	456	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	68	85	478	67	87	386	953	-	-	785	-	-
Mov Cap-2 Maneuver	68	85	-	67	87	-	-	-	-	-	-	-
Stage 1	406	440	-	276	301	-	-	-	-	-	-	-
Stage 2	270	295	-	406	440	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	27.3	69.4	0.9	0.2
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	953	-	-	68	300	75	785	-	-
HCM Lane V/C Ratio	0.092	-	-	0.103	0.093	0.264	0.022	-	-
HCM Control Delay (s)	9.2	-	-	63.9	18.2	69.4	9.7	0	-
HCM Lane LOS	A	-	-	F	C	F	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0.3	0.3	0.9	0.1	-	-



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	193	15	16	595	282	410
Future Volume (veh/h)	193	15	16	595	282	410
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1811	1900	1900	1811	1678	1870
Adj Flow Rate, veh/h	227	18	19	700	332	482
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	6	0	0	6	15	2
Cap, veh/h	351	328	472	929	860	813
Arrive On Green	0.20	0.20	0.51	0.51	0.51	0.51
Sat Flow, veh/h	1725	1610	681	1811	1678	1585
Grp Volume(v), veh/h	227	18	19	700	332	482
Grp Sat Flow(s),veh/h/ln	1725	1610	681	1811	1678	1585
Q Serve(g_s), s	4.3	0.3	0.6	10.8	4.2	7.5
Cycle Q Clear(g_c), s	4.3	0.3	4.9	10.8	4.2	7.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	351	328	472	929	860	813
V/C Ratio(X)	0.65	0.05	0.04	0.75	0.39	0.59
Avail Cap(c_a), veh/h	930	868	722	1593	1475	1394
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.9	11.3	6.7	6.8	5.2	6.0
Incr Delay (d2), s/veh	2.0	0.1	0.0	1.3	0.3	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.1	0.1	1.7	0.6	1.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.9	11.4	6.7	8.1	5.5	6.7
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	245			719	814	
Approach Delay, s/veh	14.6			8.0	6.2	
Approach LOS	B			A	A	

Timer - Assigned Phs	2				6	8
Phs Duration (G+Y+Rc), s	23.1				23.1	12.2
Change Period (Y+Rc), s	6.0				6.0	6.0
Max Green Setting (Gmax), s	30.0				30.0	18.0
Max Q Clear Time (g_c+I1), s	9.5				12.8	6.3
Green Ext Time (p_c), s	3.5				4.3	0.5

Intersection Summary	
HCM 6th Ctrl Delay	8.1
HCM 6th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	255	460	905	368	168	136
Future Volume (veh/h)	255	460	905	368	168	136
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1767	1826	1870	1841	1767	1544
Adj Flow Rate, veh/h	268	484	953	387	177	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	5	2	4	9	24
Cap, veh/h	382	352	1000	1248	228	
Arrive On Green	0.23	0.23	0.50	0.68	0.13	0.00
Sat Flow, veh/h	1682	1547	1781	1841	1767	1309
Grp Volume(v), veh/h	268	484	953	387	177	0
Grp Sat Flow(s),veh/h/ln	1682	1547	1781	1841	1767	1309
Q Serve(g_s), s	15.5	24.0	46.9	9.1	10.2	0.0
Cycle Q Clear(g_c), s	15.5	24.0	46.9	9.1	10.2	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	382	352	1000	1248	228	
V/C Ratio(X)	0.70	1.38	0.95	0.31	0.78	
Avail Cap(c_a), veh/h	382	352	1136	1499	335	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.5	40.8	18.0	6.9	44.5	0.0
Incr Delay (d2), s/veh	5.6	186.3	15.6	0.1	6.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	27.1	20.3	2.9	4.7	0.0
Unsig. Movement Delay, s/veh						0.00
LnGrp Delay(d),s/veh	43.1	227.1	33.6	7.1	51.2	0.0
LnGrp LOS	D	F	C	A	D	A
Approach Vol, veh/h	752			1340	320	A
Approach Delay, s/veh	161.5			25.9	28.3	
Approach LOS	F			C	C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	17.9	18.6		29.0		76.6
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s	60.0	19.0		23.0		85.0
Max Q Clear Time (g_c+I1), s	48.9	12.2		26.0		11.1
Green Ext Time (p_c), s	3.0	0.4		0.0		2.3

Intersection Summary	
HCM 6th Ctrl Delay	68.5
HCM 6th LOS	E

Notes

Unsignalized Delay for [SBR] is included in calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	616	171	19	1045	10	377	47	27	38	44	339
Future Volume (veh/h)	158	616	171	19	1045	10	377	47	27	38	44	339
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1781	1900	1826	1841	1307	1885	1796	1781	1856	1870	1870
Adj Flow Rate, veh/h	172	670	0	21	1136	11	473	0	0	41	48	368
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	8	0	5	4	40	1	7	8	3	2	2
Cap, veh/h	247	1427		327	1303	13	577	288	0	366	387	328
Arrive On Green	0.08	0.42	0.00	0.03	0.37	0.37	0.16	0.00	0.00	0.21	0.21	0.21
Sat Flow, veh/h	1753	3385	1610	1739	3549	34	3591	1796	0	1767	1870	1585
Grp Volume(v), veh/h	172	670	0	21	560	587	473	0	0	41	48	368
Grp Sat Flow(s),veh/h/ln	1753	1692	1610	1739	1749	1835	1795	1796	0	1767	1870	1585
Q Serve(g_s), s	6.4	15.8	0.0	0.8	33.1	33.1	14.1	0.0	0.0	2.1	2.3	23.0
Cycle Q Clear(g_c), s	6.4	15.8	0.0	0.8	33.1	33.1	14.1	0.0	0.0	2.1	2.3	23.0
Prop In Lane	1.00		1.00	1.00		0.02	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	247	1427		327	642	674	577	288	0	366	387	328
V/C Ratio(X)	0.70	0.47		0.06	0.87	0.87	0.82	0.00	0.00	0.11	0.12	1.12
Avail Cap(c_a), veh/h	272	1524		368	709	744	679	340	0	366	387	328
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.8	23.1	0.0	20.8	32.7	32.7	45.1	0.0	0.0	35.7	35.8	44.0
Incr Delay (d2), s/veh	6.7	0.2	0.0	0.1	10.8	10.3	6.9	0.0	0.0	0.1	0.1	86.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	6.2	0.0	0.3	15.4	16.1	6.8	0.0	0.0	0.9	1.1	16.7
Unsig. Movement Delay, s/veh			0.00									
LnGrp Delay(d),s/veh	31.5	23.4	0.0	20.9	43.4	43.0	51.9	0.0	0.0	35.9	36.0	130.3
LnGrp LOS	C	C	A	C	D	D	D	A	A	D	D	F
Approach Vol, veh/h		1028	A		1168			473			457	
Approach Delay, s/veh		20.5			42.8			51.9			112.0	
Approach LOS		C			D			D			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.4	45.8		28.0	8.4	51.8		22.8
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	10.0	44.0		22.0	5.0	49.0		20.0
Max Q Clear Time (g_c+I1), s	8.4	35.1		25.0	2.8	17.8		16.1
Green Ext Time (p_c), s	0.1	4.7		0.0	0.0	5.0		0.7

Intersection Summary	
HCM 6th Ctrl Delay	47.0
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR] is included in calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	39.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	112	0	57	0	2	2	68	619	1	1	738	171
Future Vol, veh/h	112	0	57	0	2	2	68	619	1	1	738	171
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	-	-	150	-	-	200
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	0	6	0	0	0	0	5	100	100	4	2
Mvmt Flow	118	0	60	0	2	2	72	652	1	1	777	180

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1578	1576	777	1605	1575	652	777	0	0	653	0	0
Stage 1	779	779	-	796	796	-	-	-	-	-	-	-
Stage 2	799	797	-	809	779	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.5	6.26	7.1	6.5	6.2	4.1	-	-	5.1	-	-
Critical Hdwy Stg 1	6.12	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4	3.354	3.5	4	3.3	2.2	-	-	3.1	-	-
Pot Cap-1 Maneuver	~ 89	111	391	86	111	471	848	-	-	602	-	-
Stage 1	389	409	-	383	402	-	-	-	-	-	-	-
Stage 2	379	401	-	377	409	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 78	96	391	65	96	471	848	-	-	602	-	-
Mov Cap-2 Maneuver	~ 78	96	-	65	96	-	-	-	-	-	-	-
Stage 1	337	407	-	332	349	-	-	-	-	-	-	-
Stage 2	325	348	-	318	407	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 405.4	28.3	1	0
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	848	-	-	107	159	602	-	-
HCM Lane V/C Ratio	0.084	-	-	1.663	0.026	0.002	-	-
HCM Control Delay (s)	9.6	0	-	$ 405.4	28.3	11	0	-
HCM Lane LOS	A	A	-	F	D	B	A	-
HCM 95th %tile Q(veh)	0.3	-	-	13.7	0.1	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

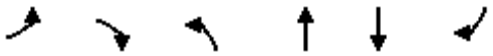
Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	19	4	72	9	2	21	28	624	8	2	832	7
Future Vol, veh/h	19	4	72	9	2	21	28	624	8	2	832	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	None	-	-	None	-	-	Yield
Storage Length	150	-	-	-	-	-	310	-	-	-	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	10	0	4	13	0	4	0
Mvmt Flow	21	4	78	10	2	23	30	678	9	2	904	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1663	1655	904	1653	1651	683	904	0	0	687	0	0
Stage 1	908	908	-	743	743	-	-	-	-	-	-	-
Stage 2	755	747	-	910	908	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.3	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.39	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	78	99	338	79	100	436	761	-	-	916	-	-
Stage 1	332	357	-	410	425	-	-	-	-	-	-	-
Stage 2	404	423	-	332	357	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	70	95	338	57	96	436	761	-	-	916	-	-
Mov Cap-2 Maneuver	70	95	-	57	96	-	-	-	-	-	-	-
Stage 1	319	356	-	394	408	-	-	-	-	-	-	-
Stage 2	366	407	-	251	356	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	32.4	38.7	0.4	0
HCM LOS	D	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	761	-	-	70	303	141	916	-	-
HCM Lane V/C Ratio	0.04	-	-	0.295	0.273	0.247	0.002	-	-
HCM Control Delay (s)	9.9	-	-	76.7	21.3	38.7	8.9	0	-
HCM Lane LOS	A	-	-	F	C	E	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	1.1	1.1	0.9	0	-	-



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	146	53	44	497	499	420
Future Volume (veh/h)	146	53	44	497	499	420
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1870	1870	1826	1826	1841
Adj Flow Rate, veh/h	152	55	46	518	520	438
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	2	2	5	5	4
Cap, veh/h	311	275	410	885	885	756
Arrive On Green	0.17	0.17	0.48	0.48	0.48	0.48
Sat Flow, veh/h	1795	1585	586	1826	1826	1560
Grp Volume(v), veh/h	152	55	46	518	520	438
Grp Sat Flow(s),veh/h/ln	1795	1585	586	1826	1826	1560
Q Serve(g_s), s	2.2	0.9	1.8	6.0	6.0	5.9
Cycle Q Clear(g_c), s	2.2	0.9	7.8	6.0	6.0	5.9
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	311	275	410	885	885	756
V/C Ratio(X)	0.49	0.20	0.11	0.59	0.59	0.58
Avail Cap(c_a), veh/h	1166	1030	747	1935	1935	1653
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.9	10.4	8.2	5.4	5.4	5.4
Incr Delay (d2), s/veh	1.2	0.4	0.1	0.6	0.6	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.2	0.1	0.6	0.6	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.1	10.7	8.4	6.0	6.1	6.1
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	207			564	958	
Approach Delay, s/veh	11.7			6.2	6.1	
Approach LOS	B			A	A	

Timer - Assigned Phs	2				6	8
Phs Duration (G+Y+Rc), s	19.2				19.2	10.1
Change Period (Y+Rc), s	6.0				6.0	6.0
Max Green Setting (Gmax), s	30.0				30.0	18.0
Max Q Clear Time (g_c+I1), s	8.0				9.8	4.2
Green Ext Time (p_c), s	4.7				3.4	0.5

Intersection Summary	
HCM 6th Ctrl Delay	6.8
HCM 6th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	285	783	578	273	354	173
Future Volume (veh/h)	285	783	578	273	354	173
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1767	1885	1856	1841	1870	1589
Adj Flow Rate, veh/h	294	807	596	281	365	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	9	1	3	4	2	21
Cap, veh/h	569	541	639	1054	414	
Arrive On Green	0.34	0.34	0.31	0.57	0.22	0.00
Sat Flow, veh/h	1682	1598	1767	1841	1870	1346
Grp Volume(v), veh/h	294	807	596	281	365	0
Grp Sat Flow(s),veh/h/ln	1682	1598	1767	1841	1870	1346
Q Serve(g_s), s	15.7	38.0	30.3	8.6	21.2	0.0
Cycle Q Clear(g_c), s	15.7	38.0	30.3	8.6	21.2	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	569	541	639	1054	414	
V/C Ratio(X)	0.52	1.49	0.93	0.27	0.88	
Avail Cap(c_a), veh/h	569	541	711	1180	466	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.8	37.1	26.6	12.1	42.3	0.0
Incr Delay (d2), s/veh	0.8	231.3	18.3	0.1	16.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	49.1	14.9	3.3	11.3	0.0
Unsig. Movement Delay, s/veh						0.00
LnGrp Delay(d),s/veh	30.6	268.4	44.9	12.2	58.5	0.0
LnGrp LOS	C	F	D	B	E	A
Approach Vol, veh/h	1101			877	543	A
Approach Delay, s/veh	204.9			34.4	39.3	
Approach LOS	F			C	D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	39.4	29.9		43.0		69.3
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s	33.0	27.0		37.0		71.0
Max Q Clear Time (g_c+I2), s	32.3	23.2		40.0		10.6
Green Ext Time (p_c), s	1.1	0.7		0.0		1.6

Intersection Summary		
HCM 6th Ctrl Delay		109.9
HCM 6th LOS		F

Notes

Unsignalized Delay for [SBR] is included in calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	241	1021	495	779	621	46	396	146	101	111	140	272
Future Volume (veh/h)	241	1021	495	779	621	46	396	146	101	111	140	272
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1900	1900	1767	1633	1885	1885	1841	1900	1900	1752
Adj Flow Rate, veh/h	277	1174	0	895	714	53	370	288	116	128	161	313
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	3	0	0	9	18	1	1	4	0	0	10
Cap, veh/h	470	940		591	1377	102	311	221	89	229	241	188
Arrive On Green	0.13	0.27	0.00	0.30	0.43	0.43	0.17	0.17	0.17	0.13	0.13	0.13
Sat Flow, veh/h	1781	3526	1610	1810	3168	235	1795	1278	515	1810	1900	1485
Grp Volume(v), veh/h	277	1174	0	895	378	389	370	0	404	128	161	313
Grp Sat Flow(s),veh/h/ln	1781	1763	1610	1810	1678	1724	1795	0	1793	1810	1900	1485
Q Serve(g_s), s	16.6	40.0	0.0	45.0	24.7	24.7	26.0	0.0	26.0	10.0	12.1	19.0
Cycle Q Clear(g_c), s	16.6	40.0	0.0	45.0	24.7	24.7	26.0	0.0	26.0	10.0	12.1	19.0
Prop In Lane	1.00		1.00	1.00		0.14	1.00		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	470	940		591	729	749	311	0	311	229	241	188
V/C Ratio(X)	0.59	1.25		1.51	0.52	0.52	1.19	0.00	1.30	0.56	0.67	1.66
Avail Cap(c_a), veh/h	496	940		591	729	749	311	0	311	229	241	188
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.1	55.0	0.0	45.6	30.9	31.0	62.0	0.0	62.0	61.6	62.5	65.5
Incr Delay (d2), s/veh	1.7	120.8	0.0	240.3	0.6	0.6	112.5	0.0	156.7	3.0	6.9	321.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	33.4	0.0	60.3	10.1	10.4	21.5	0.0	25.3	4.8	6.3	23.9
Unsig. Movement Delay, s/veh			0.00									
LnGrp Delay(d),s/veh	33.8	175.8	0.0	285.8	31.6	31.6	174.5	0.0	218.7	64.6	69.4	386.8
LnGrp LOS	C	F	A	F	C	C	F	A	F	E	E	F
Approach Vol, veh/h		2020	A		1662			774			602	
Approach Delay, s/veh		106.8			168.5			197.6			233.4	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	24.8	70.2		24.0	50.0	45.0		31.0
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	21.0	62.0		18.0	44.0	39.0		25.0
Max Q Clear Time (g_c+I1), s	18.6	26.7		21.0	47.0	42.0		28.0
Green Ext Time (p_c), s	0.2	5.3		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	156.1
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR] is included in calculations of the approach delay and intersection delay.

APPENDIX F

HEAVY VEHICLE ENHANCED FOCUS AREA ANALYSIS

F. Heady Vehicle Enhanced Focus Area

The TIS shall include a Heavy Vehicle Enhanced Focus Area component if the Project includes industrial or commercial components, or other components expected to generate Heavy Vehicles. The requirements in this section shall apply to not only commercial Heavy Vehicles but also to transit buses, school buses, and fire engines.

F.1. Heavy Vehicle Routing

The project site can be accessed both from the north and south, with the main drive off SR-42. The closest interchange is at Bill Gardner Parkway to the south of the site, while secondary access can be achieved from the interchange at North McDonough Rd to the north of the site. Therefore, most heavy trucks expected to be generated by the development will access the site via SR-42 coming from the south via Bill Gardner Parkway.

Trucks:

- 20% of trips will travel to/from the north via SR 42
- 80% of trips will travel to/from the south via SR 42
- 60% of the trips will travel to/from the east via SR 42 and Market Place Boulevard
- 20% of the trips will travel to/from the east via SR 42 and Bill Gardner Parkway

F.2. Pavement Conditions

The TIS shall note the pavement condition of the Project's Heavy Vehicle routes. The Heavy Vehicle route pavement conditions analysis shall be limited to the roadway segments between all proposed Heavy Vehicle driveways and the nearest Study Network intersections in both directions. The Heavy Vehicle route pavement conditions analysis shall specifically indicate roadway sections where the pavement condition is distressed. Each of the following images was taken from Google Maps Street View which was recorded in the part of 2021.

End of new pavement and beginning of undeveloped road with old pavement on SR-42.

Cracked pavement at possible fire access on Bethlehem Road.

Site entrance pavement conditions on SR-42 on intersection with Pine Grove.

Pavement cracking on intersection of US-23 and Bethlehem Road.

Pavement in good conditions at left turn at the cross-section between Bill Gardner Parkway and SR-42.

New pavement on intersection of Colvin Drive and SR-42.

F.3. Roadway Width Inventory

Roadway Width: The TIS shall note the lane width for the project's Heavy Vehicle driveways and the roadway segments between the driveways and the nearest Study Network intersections in each direction Heavy Vehicles are expected to travel. The analysis shall include the roadway width of each lane, in tabular format, for district roadway segments. The table below summarizes the pavement lane characteristics along the designated Heavy Truck Route proposed for this development.

ROADWAY	LANES					
	SECTION	TYPE	# OF LANES	DIRECTION	ACTUAL WIDTH	REGULATION WIDTH
GA-42	Bethlehem Rd and SR42	Travel	1	NB	11.5	12
		Travel	1	SB	11.5	12
		Travel	1	EB	11	11
		Travel	1	WB	11	11
		Right-Turn	1	NB	11	12
		Right-Turn	1	SB	11	12
	Pine Grove Road and SR42	Travel	1	NB	12	12
		Travel	1	SB	12	12
		Travel	1	EB	11	12
		Travel	1	WB	11	12
	Market Place Blvd and SR42	Travel	1	NB	12	12
		Travel	1	SB	12	12
		Travel	1	WB	11	11
		Right-Turn	1	SB	12	12
		Right-Turn	1	EB	11.5	11
		Left-Turn	1	NB	12	12
		Left-Turn	1	EB	12	12

F.4. Corner Radii Analysis

The TIS shall note the corner radii for curbs/driveways and the anticipated wheel-path for the Project intersections. This information shall be included in as a diagram along with Heavy Vehicle radii standards for the typical Heavy Vehicles proposed to access the site.

An Auto-Turn Analysis was performed at the following intersections with a WB-67 Design Vehicle Turn template:

- Market Place Blvd
- Site Entrance
- Bethlehem Road

The graphical results of the turning analysis can be found in Appendix F. Analysis indicates that the existing and proposed infrastructure is adequate to accommodate the design vehicle with one exception. The WB-67 vehicle encroaches in a few lanes in the Site Entrance, Bethlehem Rd and Market Place Blvd. It should be noted that heavy trucks currently utilize all intersections mentioned above.

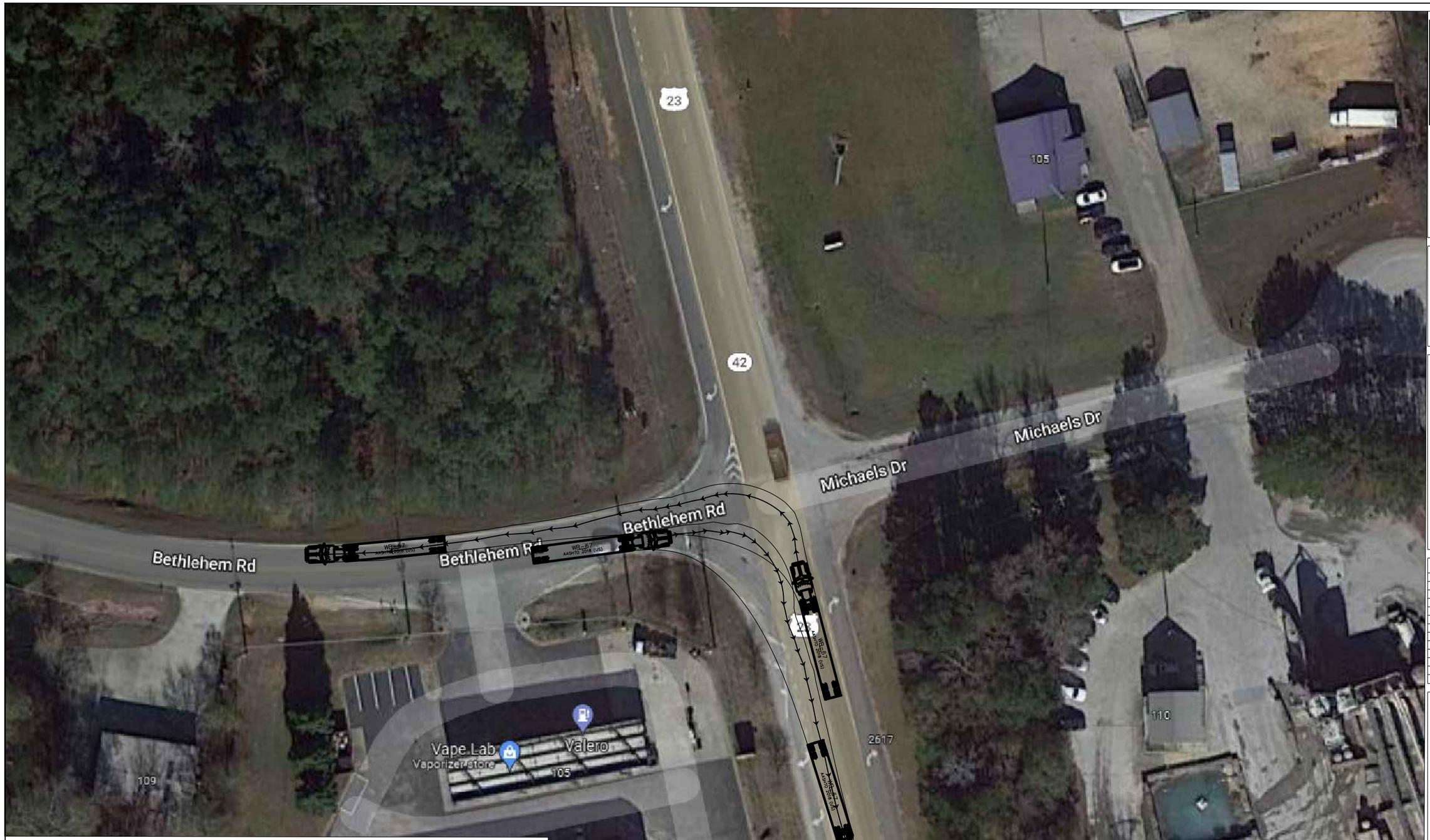
F.5. Heavy Vehicle Staging

Truck docks (loading/unloading areas) will be provided on each one of the three buildings that are proposed for this project. The truck courts will provide ample space for tractor-trailer turning movements and allow for staging while other vehicles are parking or maneuvering. All traffic, including trucks, will enter the site from SR-42. The first allowed turning movement for tractor-trailers is approximately 230' feet from SR-42. That alone would provide storage for up to 3 tractor-trailers which does not exceed the seven (7) AM peak hour and eleven (11) PM peak hour truck inbound trips. However, the designed spinal road will provide 16 extra tractor-trailer spaces. Vehicular access is proposed for all three buildings, which will give enough parking area for employees and visitors; and will avoid queuing.

Based on this development being a speculative development, the exact delivery hours and number of deliveries are unknown. The highest volume of deliveries is typically during the day and off-peak hours.

F.6. Pedestrian Safety

The Site Driveway connection to SR-42 will provide a crosswalk. Americans with Disabilities Act compliant ramps will also be provided at this location. Internally on the site, pedestrian sidewalks will be provided from automobile parking areas to the buildings.



GRAPHIC SCALE

-50 0 25 50 100 200

(IN FEET)
1 INCH = 50 FT.

NORTH

GPS LOCATION OF SITE:
33.373593° N, -84.125164° W

EBERLY & ASSOCIATES
TEL: 770.452.7849 FAX: 770.452.0086
1852 CENTURY PLACE, SUITE 202
ATLANTA, GEORGIA 30345
WWW.EBERLY.NET

LAND PLANNING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE

PROJECT:
SANSONE
SR-42 LOCUST GROVE
LAND LOT 233, 234 AND 247
2ND DISTRICT
HENRY COUNTY, GEORGIA
3316 SOUTH COBB DR SE
SMYRNA, GA 30080

REVISIONS:

AUTO-TURN EXHIBITS

SCALE:	1" = 50'
DATE:	02/11/2022
DRAWN BY:	BP
PROJECT MANAGER:	WG
QA/QC CHECK:	WILL GREER

PROJECT NO.
21-098

CONCEPT

GRAPHIC SCALE

-50 0 25 50 100 200

(IN FEET)
1 INCH = 50 FT.

NORTH

GPS LOCATION OF SITE:
33.373593° N, -84.125164° W

EBERLY & ASSOCIATES
TEL: 770.452.7849 FAX: 770.452.0086
1852 CENTURY PLACE, SUITE 202
ATLANTA, GEORGIA 30345
WWW.EBERLY.NET

LAND PLANNING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE

PROJECT: SANSONE
SR-42 LOCUST GROVE
LAND LOT 233, 234 AND 247
2ND DISTRICT
HENRY COUNTY, GEORGIA
3316 SOUTH COBB DR SE
SMYRNA, GA 30080

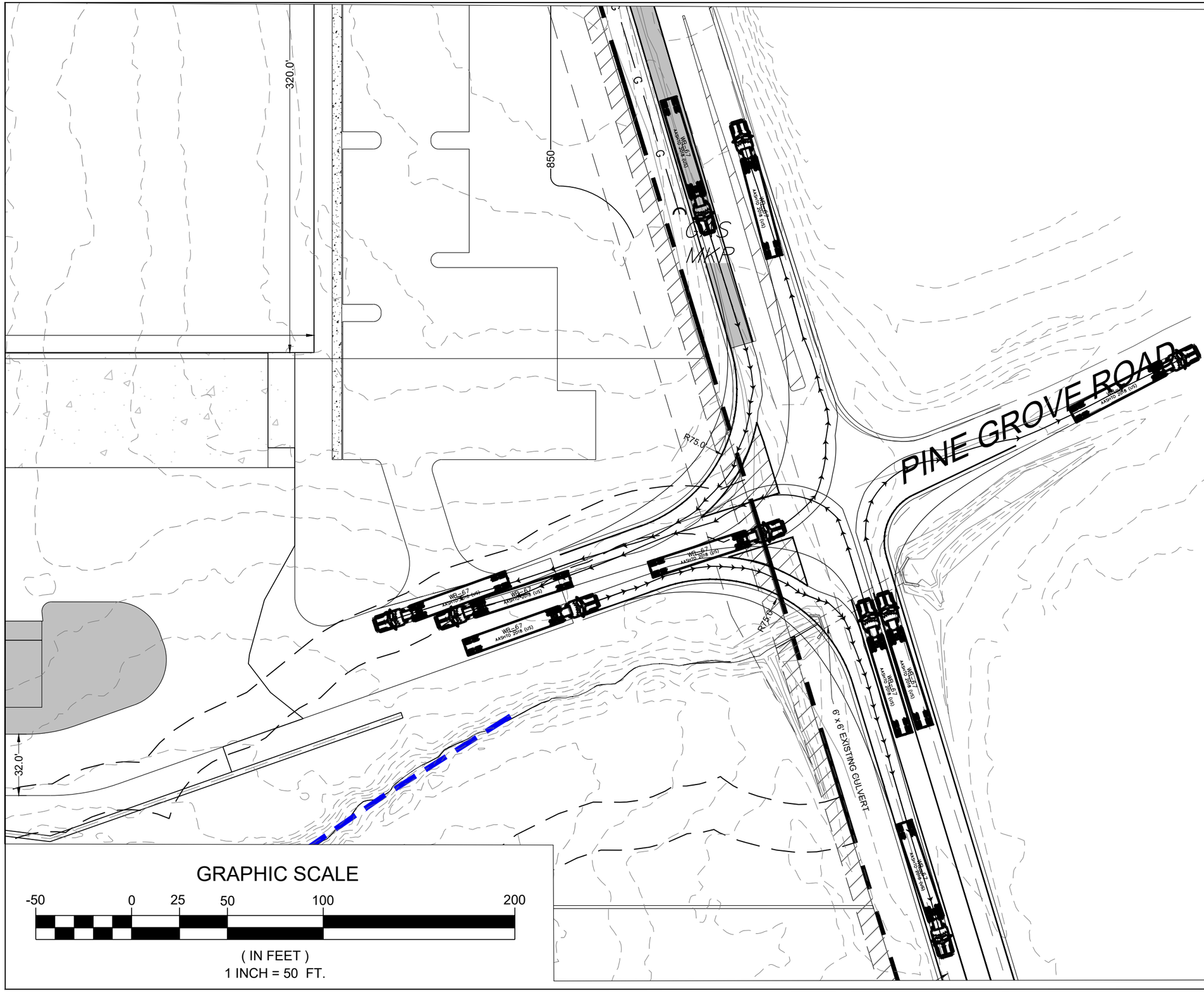
REVISIONS:

AUTO-TURN EXHIBITS

SCALE:	1"= 60'
DATE:	02/11/2022
DRAWN BY:	BP
PROJECT MANAGER:	WG
QA/QC CHECK:	WILL GREER

PROJECT NO.
21-098

CONCEPT



GRAPHIC SCALE

-50 0 25 50 100 200

(IN FEET)
1 INCH = 50 FT.

NORTH

GPS LOCATION OF SITE:
33.373593° N, -84.125164° W

EBERLY & ASSOCIATES
TEL: 770.452.7849 FAX: 770.452.0086
1852 CENTURY PLACE, SUITE 202
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LAND PLANNING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE

PROJECT: SANSONE
SR-42 LOCUST GROVE
LAND LOT 233, 234 AND 247
2ND DISTRICT
HENRY COUNTY, GEORGIA
3316 SOUTH COBB DR SE
SMYRNA, GA 30080

REVISIONS:

AUTO-TURN EXHIBITS

SCALE:	1" = 50'
DATE:	02/11/2022
DRAWN BY:	BF
PROJECT MANAGER:	WG
QA/QC CHECK:	WILL GREER

PROJECT NO.
21-098

CONCEPT

S1

APPENDIX G

QUEUE LENGTH ANALYSIS REPORTS

Intersection: 1: SR 42 & Bethlehem Rd/Michaels Dr

Movement	EB	WB	NB
Directions Served	LTR	LTR	LT
Maximum Queue (ft)	116	47	76
Average Queue (ft)	86	23	45
95th Queue (ft)	129	57	93
Link Distance (ft)	466	354	1608
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: SR 42 & Site Driveway/Pine Grove Rd

Movement	WB
Directions Served	LTR
Maximum Queue (ft)	31
Average Queue (ft)	6
95th Queue (ft)	27
Link Distance (ft)	393
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: SR 42 & Marketplace Blvd

Movement	EB
Directions Served	L
Maximum Queue (ft)	99
Average Queue (ft)	61
95th Queue (ft)	95
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	250
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: SR 42 & Bill Gardner Pkwy

Movement	EB	EB	NB	NB	SB
Directions Served	L	R	L	T	T
Maximum Queue (ft)	272	196	475	574	165
Average Queue (ft)	154	100	472	467	112
95th Queue (ft)	254	208	480	793	158
Link Distance (ft)	2301	2301		548	2848
Upstream Blk Time (%)				15	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)			350		
Storage Blk Time (%)			35		
Queuing Penalty (veh)			116		

Intersection: 5: Tanger Blvd/Marketplace Blvd & Bill Gardner Pkwy

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	T	L	T	TR	L	LTR	L	T	R
Maximum Queue (ft)	99	227	164	47	404	446	216	161	88	22	133
Average Queue (ft)	70	95	90	28	301	306	163	111	54	14	90
95th Queue (ft)	105	211	151	56	484	513	249	173	89	29	127
Link Distance (ft)		737	737		2301	2301	490	490		2733	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	150			140					175		350
Storage Blk Time (%)		5			25						
Queuing Penalty (veh)		5			5						

Network Summary

Network wide Queuing Penalty: 126

Intersection: 1: SR 42 & Bethlehem Rd/Michaels Dr

Movement	EB	NB
Directions Served	LTR	LT
Maximum Queue (ft)	159	51
Average Queue (ft)	112	15
95th Queue (ft)	175	49
Link Distance (ft)	466	1608
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: SR 42 & Site Driveway/Pine Grove Rd

Movement	WB
Directions Served	LTR
Maximum Queue (ft)	30
Average Queue (ft)	18
95th Queue (ft)	43
Link Distance (ft)	393
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: SR 42 & Marketplace Blvd

Movement	EB	EB	NB
Directions Served	L	R	L
Maximum Queue (ft)	51	26	27
Average Queue (ft)	29	5	10
95th Queue (ft)	58	22	31
Link Distance (ft)		2733	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	250		250
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: SR 42 & Bill Gardner Pkwy

Movement	EB	EB	NB	NB	SB
Directions Served	L	R	L	T	T
Maximum Queue (ft)	236	430	429	135	182
Average Queue (ft)	151	274	247	51	163
95th Queue (ft)	262	421	409	128	204
Link Distance (ft)	2301	2301		548	2848
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			350		
Storage Blk Time (%)			4		
Queuing Penalty (veh)			11		

Intersection: 5: Tanger Blvd/Marketplace Blvd & Bill Gardner Pkwy

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	L	T	TR	L	LTR	L	T
Maximum Queue (ft)	186	752	634	190	919	753	330	346	112	150
Average Queue (ft)	139	585	540	189	646	429	272	296	79	80
95th Queue (ft)	202	789	710	190	997	809	349	357	111	138
Link Distance (ft)		737	737		2301	2301	490	490		2733
Upstream Blk Time (%)		1								
Queuing Penalty (veh)		0								
Storage Bay Dist (ft)	150			140					175	
Storage Blk Time (%)	11	67		65	8					
Queuing Penalty (veh)	57	148		194	59					

Network Summary

Network wide Queuing Penalty: 469

Intersection: 1: SR 42 & Bethlehem Rd/Michaels Dr

Movement	EB	WB	NB
Directions Served	LTR	LTR	LT
Maximum Queue (ft)	155	41	139
Average Queue (ft)	76	8	48
95th Queue (ft)	142	36	135
Link Distance (ft)	466	354	1608
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			0
Queuing Penalty (veh)			0

Intersection: 2: SR 42 & Site Driveway/Pine Grove Rd

Movement	WB	SB
Directions Served	LTR	LTR
Maximum Queue (ft)	38	50
Average Queue (ft)	8	24
95th Queue (ft)	33	60
Link Distance (ft)	393	1608
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: SR 42 & Marketplace Blvd

Movement	EB	NB	NB	SB
Directions Served	L	L	T	T
Maximum Queue (ft)	90	17	94	121
Average Queue (ft)	44	3	53	56
95th Queue (ft)	95	14	113	117
Link Distance (ft)			2848	5213
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	250	250		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: SR 42 & Bill Gardner Pkwy

Movement	EB	EB	NB	NB	SB
Directions Served	L	R	L	T	T
Maximum Queue (ft)	196	184	431	95	116
Average Queue (ft)	144	112	330	54	72
95th Queue (ft)	212	190	472	106	121
Link Distance (ft)	2301	2301		548	2848
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			350		
Storage Blk Time (%)			6		
Queuing Penalty (veh)			21		

Intersection: 5: Tanger Blvd/Marketplace Blvd & Bill Gardner Pkwy

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	T	L	T	TR	L	LTR	L	T	R
Maximum Queue (ft)	87	200	165	25	330	344	306	250	47	42	257
Average Queue (ft)	53	113	108	10	244	242	216	180	26	21	199
95th Queue (ft)	90	195	181	29	345	344	320	249	45	43	286
Link Distance (ft)		737	737		2301	2301	490	490		2733	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	150			140					175		350
Storage Blk Time (%)		6			19						
Queuing Penalty (veh)		7			4						

Network Summary

Network wide Queuing Penalty: 32

Intersection: 1: SR 42 & Bethlehem Rd/Michaels Dr

Movement	EB	NB
Directions Served	LTR	LT
Maximum Queue (ft)	93	25
Average Queue (ft)	50	15
95th Queue (ft)	90	35
Link Distance (ft)	466	1608
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: SR 42 & Site Driveway/Pine Grove Rd

Movement	WB
Directions Served	LTR
Maximum Queue (ft)	49
Average Queue (ft)	28
95th Queue (ft)	54
Link Distance (ft)	393
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: SR 42 & Marketplace Blvd

Movement	EB	EB	NB	NB	SB
Directions Served	L	R	L	T	T
Maximum Queue (ft)	90	25	74	198	119
Average Queue (ft)	46	5	18	69	77
95th Queue (ft)	91	21	65	191	129
Link Distance (ft)		2733		2848	5213
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	250		250		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 4: SR 42 & Bill Gardner Pkwy

Movement	EB	EB	NB	NB	SB
Directions Served	L	R	L	T	T
Maximum Queue (ft)	124	536	437	163	224
Average Queue (ft)	63	287	248	85	175
95th Queue (ft)	138	569	409	150	248
Link Distance (ft)	2301	2301		548	2848
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			350		
Storage Blk Time (%)			5		
Queuing Penalty (veh)			12		

Intersection: 5: Tanger Blvd/Marketplace Blvd & Bill Gardner Pkwy

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	T	R	L	T	TR	L	LTR	L	T	R
Maximum Queue (ft)	200	752	771	744	190	1215	967	487	505	113	154	51
Average Queue (ft)	128	633	597	149	188	821	673	314	445	76	123	20
95th Queue (ft)	231	817	826	640	192	1418	1224	489	535	130	160	60
Link Distance (ft)		737	737	737		2301	2301	490	490		2733	
Upstream Blk Time (%)		12	11	1				0	8			
Queuing Penalty (veh)		0	0	0				0	0			
Storage Bay Dist (ft)	150				140					175		350
Storage Blk Time (%)	2	63			59	8						
Queuing Penalty (veh)	9	142			182	61						

Network Summary

Network wide Queuing Penalty: 406

Intersection: 1: SR 42 & Bethlehem Rd/Michaels Dr

Movement	EB	NB
Directions Served	LTR	LT
Maximum Queue (ft)	140	95
Average Queue (ft)	73	19
95th Queue (ft)	134	82
Link Distance (ft)	466	1606
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: SR 42 & Site Driveway/Pine Grove Rd

Movement	WB	NB	SB
Directions Served	LTR	L	LT
Maximum Queue (ft)	31	22	25
Average Queue (ft)	24	8	5
95th Queue (ft)	44	26	21
Link Distance (ft)	387		1606
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		310	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: SR 42 & Marketplace Blvd

Movement	EB	NB	NB	SB
Directions Served	L	L	T	T
Maximum Queue (ft)	156	28	116	110
Average Queue (ft)	107	11	60	67
95th Queue (ft)	160	33	113	139
Link Distance (ft)			2848	5207
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	250	250		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: SR 42 & Bill Gardner Pkwy

Movement	EB	EB	NB	NB	SB
Directions Served	L	R	L	T	T
Maximum Queue (ft)	244	134	474	582	199
Average Queue (ft)	115	80	464	375	108
95th Queue (ft)	223	163	492	768	191
Link Distance (ft)	2301	2301		548	2848
Upstream Blk Time (%)				6	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)			350		
Storage Blk Time (%)			19		
Queuing Penalty (veh)			71		

Intersection: 5: Tanger Blvd/Marketplace Blvd & Bill Gardner Pkwy

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	T	L	T	TR	L	LTR	L	T	R
Maximum Queue (ft)	165	137	156	189	223	225	231	194	69	65	166
Average Queue (ft)	118	88	116	43	178	186	194	155	28	21	117
95th Queue (ft)	180	138	164	164	235	238	234	232	71	66	182
Link Distance (ft)		737	737		2301	2301	490	490		2733	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	150			140					175		350
Storage Blk Time (%)	4	0			22						
Queuing Penalty (veh)	12	0			4						

Network Summary

Network wide Queuing Penalty: 87

Intersection: 1: SR 42 & Bethlehem Rd/Michaels Dr

Movement	EB	WB	NB
Directions Served	LTR	LTR	LT
Maximum Queue (ft)	266	22	118
Average Queue (ft)	156	4	53
95th Queue (ft)	262	19	132
Link Distance (ft)	466	354	1606
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: SR 42 & Site Driveway/Pine Grove Rd

Movement	EB	EB	WB	NB
Directions Served	L	TR	LTR	L
Maximum Queue (ft)	30	140	31	45
Average Queue (ft)	6	51	30	23
95th Queue (ft)	26	156	31	47
Link Distance (ft)		589	387	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	150			310
Storage Blk Time (%)		0		
Queuing Penalty (veh)		0		

Intersection: 3: SR 42 & Marketplace Blvd

Movement	EB	NB	NB	SB
Directions Served	L	L	T	T
Maximum Queue (ft)	90	28	138	74
Average Queue (ft)	56	6	59	52
95th Queue (ft)	92	24	143	83
Link Distance (ft)			2848	5207
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	250	250		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: SR 42 & Bill Gardner Pkwy

Movement	EB	EB	NB	NB	SB
Directions Served	L	R	L	T	T
Maximum Queue (ft)	301	408	474	563	370
Average Queue (ft)	147	197	232	137	249
95th Queue (ft)	335	477	434	490	431
Link Distance (ft)	2301	2301		548	2848
Upstream Blk Time (%)				3	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)			350		
Storage Blk Time (%)			4		7
Queuing Penalty (veh)			11		12

Intersection: 5: Tanger Blvd/Marketplace Blvd & Bill Gardner Pkwy

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	T	R	L	T	TR	L	LTR	L	T	R
Maximum Queue (ft)	200	752	752	744	190	1048	924	350	432	89	194	56
Average Queue (ft)	199	569	545	149	189	726	555	312	319	55	144	29
95th Queue (ft)	200	853	862	640	190	1112	985	359	445	91	217	68
Link Distance (ft)		737	737	737		2301	2301	490	490		2733	
Upstream Blk Time (%)		11	2	1								
Queuing Penalty (veh)		0	0	0								
Storage Bay Dist (ft)	150				140					175		350
Storage Blk Time (%)	10	66			68	6					17	
Queuing Penalty (veh)	50	160			211	44					64	

Network Summary

Network wide Queuing Penalty: 551

APPENDIX H

SIGNAL WARRANT ANALYSIS

Back to Chapter 4C

2009 Edition Part 4 Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume

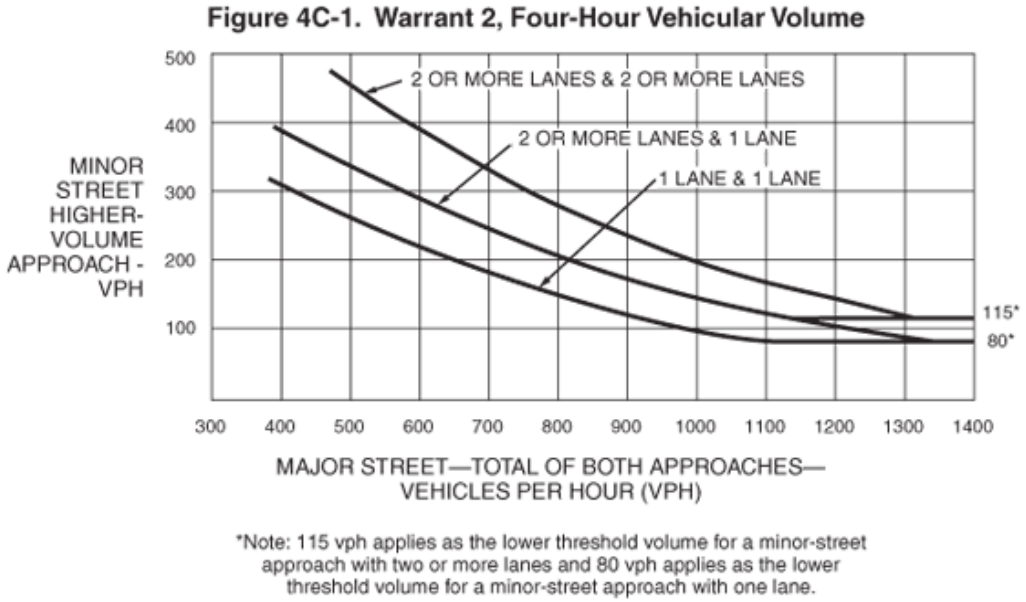


Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume

This figure shows a graph depicting numerical values for Warrant 2, Four-Hour Vehicular Volume (see Section 4C.03 for further details). The figure displays three curves—one for each existing combination of approach lanes: one lane and one lane, two or more lanes and one lane, and two or more lanes and two or more lanes.

The table below shows the approximate vehicles per hour (VPH) on the major street and corresponding VPH on the minor street for each combination of approach lanes.

Table for Figure 4C-1

One lane and one lane		Two or more lanes and one lane		Two or more lanes and two or more lanes	
VPH on the major street (Total of both approaches)	**VPH on the minor street (Higher volume approach)**	**VPH on the major street (Total of both approaches)**	**VPH on the minor street (Higher volume approach)**	**VPH on the major street (Total of both approaches)**	**VPH on the minor street (Higher volume approach)**
1400	80	1400	80 or 115*	1400	115
1300	80	1300	90 or 115*	1300	115
1200	80	1200	100 or 115*	1200	145
1100	80	1100	120	1100	165
1000	100	1000	150	1000	200
900	120	900	175	900	240
800	150	800	200	800	275
700	180	700	250	700	340
600	220	600	290	600	390

500	260	500	340	500	460
400	310	400	390	400	Not available

* Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

Back to Chapter 4C

TRAFFIC DATA SERVICES

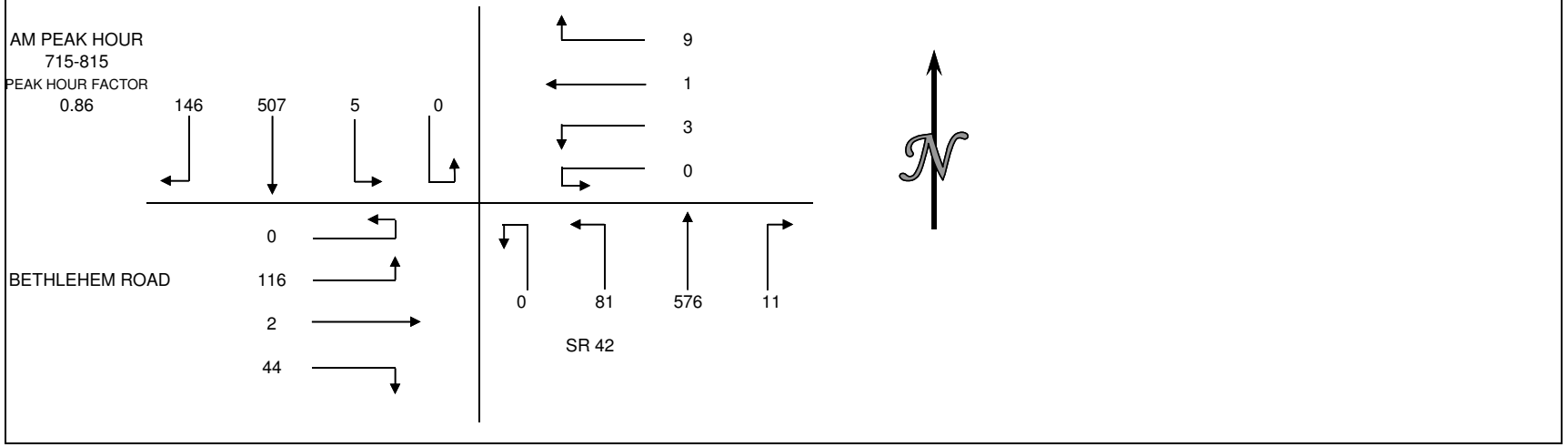
Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT ALL VEHICLES SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 7:00 AM TO 9:00 AM
INTERSECTION: N/S SR 42/US 23
E/W BETHLEHEM ROAD

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
700-715	42	108	1	0	4	1	0	0	3	105	24	0	7	0	21	0	316
715-730	34	139	1	0	1	0	0	0	2	108	19	0	14	1	33	0	352
730-745	46	142	1	0	3	1	1	0	4	166	22	0	13	0	36	0	435
745-800	34	123	0	0	2	0	1	0	2	159	21	0	10	1	25	0	378
800-815	32	103	3	0	3	0	1	0	3	143	19	0	7	0	22	0	336
815-830	18	92	2	0	1	1	2	0	1	119	8	0	9	0	14	0	267
830-845	13	131	0	0	3	3	2	0	2	104	6	0	7	0	20	0	291
845-900	15	46	0	0	0	0	0	0	3	101	10	0	9	0	9	0	193
HOUR TOTALS																	
700-800	156	512	3	0	10	2	2	0	11	538	86	0	44	2	115	0	1481
715-815	146	507	5	0	9	1	3	0	11	576	81	0	44	2	116	0	1501
730-830	130	460	6	0	9	2	5	0	10	587	70	0	39	1	97	0	1416
745-845	97	449	5	0	9	4	6	0	8	525	54	0	33	1	81	0	1272
800-900	78	372	5	0	7	4	5	0	9	467	43	0	32	0	65	0	1087



TRAFFIC DATA SERVICES

Phone: (678) 687-8266 Fax: (404) 294-6122

INTERSECTION TURNING MOVEMENT COUNT ALL VEHICLES SUMMARY

CLIENT: NV5
PROJECT: HENRY COUNTY TRAFFIC STUDY (3121135)
DATE: WEDNESDAY, FEBRUARY 16TH 2022
PERIOD: 4:00 PM TO 6:00 PM
INTERSECTION: N/S SR 42/US 23
E/W BETHLEHEM ROAD

VEHICLE COUNTS

PERIOD 15 MIN COUNTS	1 SBRT	2 SBTH	3 SBLT	3U SBUT	4 WBRT	5 WBTH	6 WBLT	6U WBUT	7 NBRT	8 NBTH	9 NBLT	9U NBUT	10 EBRT	11 EBTH	12 EBLT	12U EBUT	TOTAL
400-415	46	171	1	0	1	0	0	0	0	145	9	0	6	0	31	0	410
415-430	36	168	0	0	1	0	0	0	0	114	16	0	12	3	21	0	371
430-445	42	182	1	0	0	1	0	0	0	141	12	0	8	0	26	0	413
445-500	33	184	0	0	1	1	0	0	0	145	14	0	20	0	25	0	423
500-515	42	160	0	0	1	0	0	0	1	159	19	0	9	0	30	0	421
515-530	50	191	0	0	0	0	0	0	0	150	14	0	17	0	29	0	451
530-545	45	175	0	0	2	0	0	0	0	130	19	0	10	0	30	0	411
545-600	26	191	0	0	0	0	0	0	0	123	15	0	17	0	32	0	404
HOUR TOTALS																	
400-500	157	705	2	0	3	2	0	0	0	545	51	0	46	3	103	0	1617
415-515	153	694	1	0	3	2	0	0	1	559	61	0	49	3	102	0	1628
430-530	167	717	1	0	2	2	0	0	1	595	59	0	54	0	110	0	1708
445-545	170	710	0	0	4	1	0	0	1	584	66	0	56	0	114	0	1706
500-600	163	717	0	0	3	0	0	0	1	562	67	0	53	0	121	0	1687

AM PEAK HOUR
430-530
PEAK HOUR FACTOR
0.95

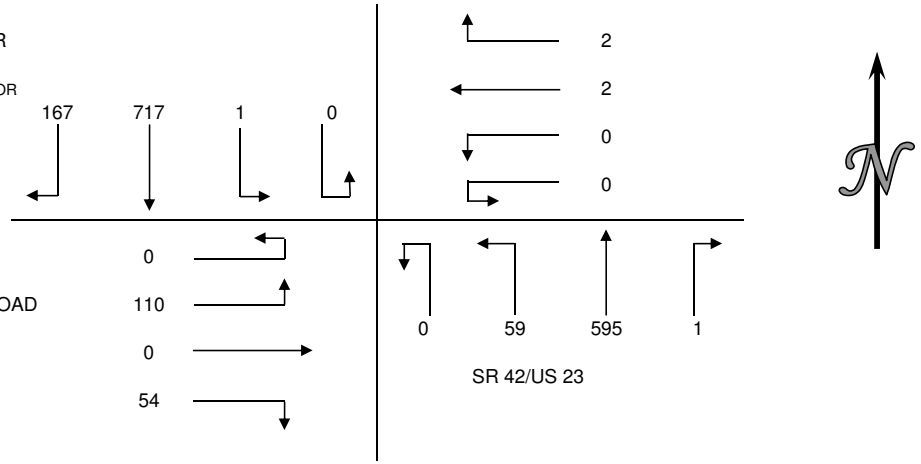
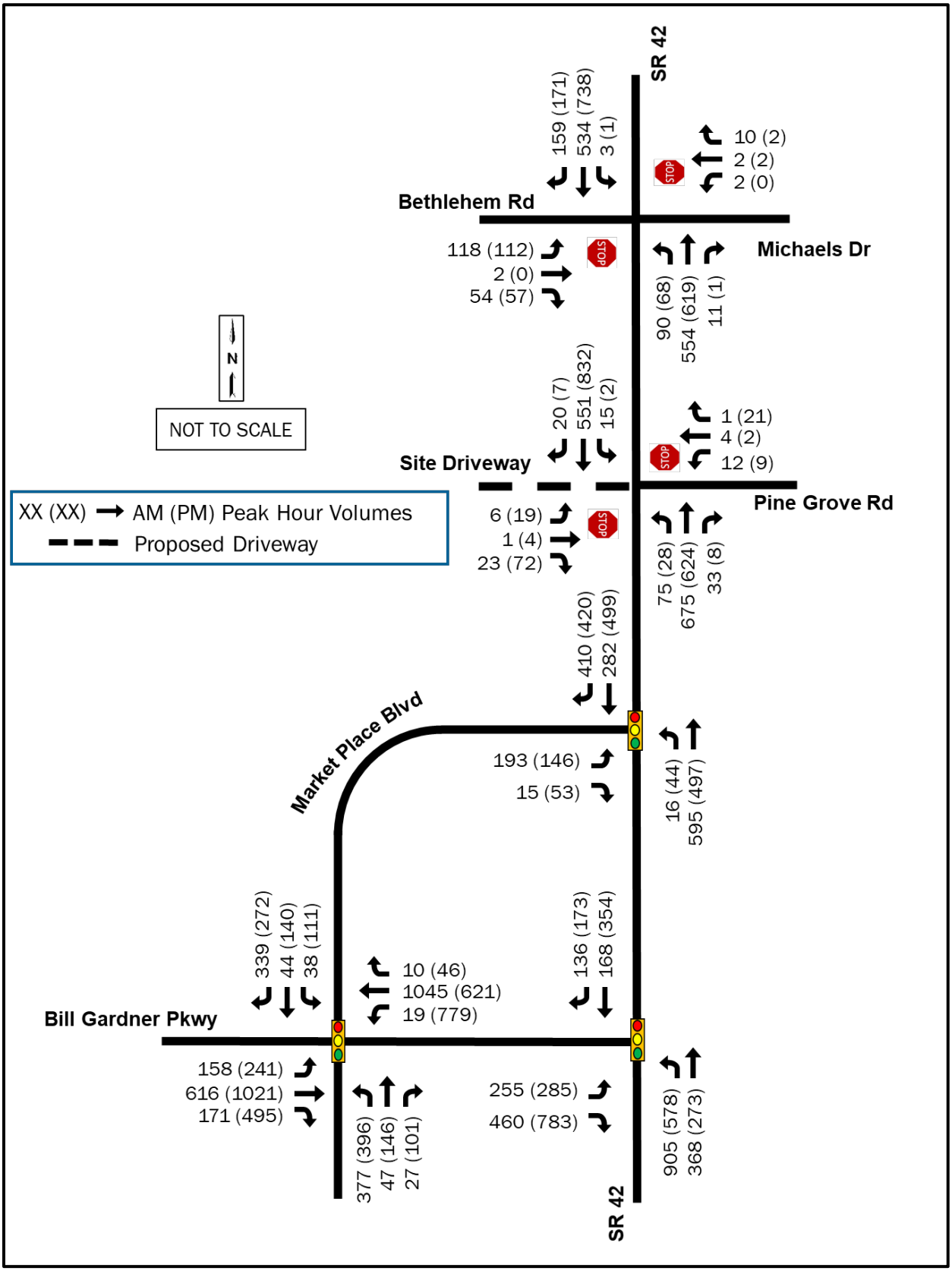


Figure 11. 2023 Build Traffic Volumes

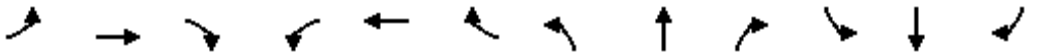


DRI 3506
Sansone Speculative Development
Signal Warrant 2 Analysis

Condition	Highest Peak Hour Volumes		4th Highest Peak (Warrant 2)		Warrant 2 - 1 & 1 Lane Thresholds			
					Highest Peak		4th Highest Peak	
	Major	Minor	Major	Minor	>1400	>80	>1100	>800
Build	1426	174	1131	138	YES	YES	YES	YES

APPENDIX I

MITIGATION CAPACITY ANALYSIS REPORTS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	118	2	54	2	2	10	90	554	11	3	534	159
Future Volume (veh/h)	118	2	54	2	2	10	90	554	11	3	534	159
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1900	1900	1159	1159	566	1411	1811	1885	1870	1811	818
Adj Flow Rate, veh/h	139	2	64	2	2	12	106	652	13	4	628	187
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	0	0	50	50	90	33	6	1	2	6	73
Cap, veh/h	295	10	88	84	39	143	162	788	1003	68	1133	435
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.63	0.63	0.63	0.63	0.63	0.63
Sat Flow, veh/h	979	55	469	47	206	761	138	1255	1598	2	1806	693
Grp Volume(v), veh/h	205	0	0	16	0	0	758	0	13	632	0	187
Grp Sat Flow(s),veh/h/ln	1503	0	0	1014	0	0	1393	0	1598	1808	0	693
Q Serve(g_s), s	6.2	0.0	0.0	0.0	0.0	0.0	14.1	0.0	0.2	0.0	0.0	7.5
Cycle Q Clear(g_c), s	6.9	0.0	0.0	0.7	0.0	0.0	24.9	0.0	0.2	10.8	0.0	7.5
Prop In Lane	0.68		0.31	0.12		0.75	0.14		1.00	0.01		1.00
Lane Grp Cap(c), veh/h	394	0	0	265	0	0	950	0	1003	1202	0	435
V/C Ratio(X)	0.52	0.00	0.00	0.06	0.00	0.00	0.80	0.00	0.01	0.53	0.00	0.43
Avail Cap(c_a), veh/h	634	0	0	424	0	0	1670	0	1797	2094	0	780
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.6	0.0	0.0	18.2	0.0	0.0	8.2	0.0	3.8	5.8	0.0	5.1
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.1	0.0	0.0	1.6	0.0	0.0	0.4	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	0.0	0.2	0.0	0.0	2.5	0.0	0.0	1.7	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.7	0.0	0.0	18.3	0.0	0.0	9.8	0.0	3.8	6.1	0.0	5.8
LnGrp LOS	C	A	A	B	A	A	A	A	A	A	A	A
Approach Vol, veh/h		205			16			771			819	
Approach Delay, s/veh		21.7			18.3			9.7			6.1	
Approach LOS		C			B			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		39.0		15.2		39.0		15.2				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		60.0		18.0		60.0		18.0				
Max Q Clear Time (g_c+I1), s		26.9		8.9		12.8		2.7				
Green Ext Time (p_c), s		6.2		0.6		4.8		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			9.5									
HCM 6th LOS			A									

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	255	460	905	368	168	136
Future Volume (veh/h)	255	460	905	368	168	136
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1767	1826	1870	1841	1767	1544
Adj Flow Rate, veh/h	268	484	953	387	177	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	5	2	4	9	24
Cap, veh/h	360	583	1008	1258	233	
Arrive On Green	0.21	0.21	0.50	0.68	0.13	0.00
Sat Flow, veh/h	1682	2723	1781	1841	1767	1309
Grp Volume(v), veh/h	268	484	953	387	177	0
Grp Sat Flow(s),veh/h/ln	1682	1362	1781	1841	1767	1309
Q Serve(g_s), s	14.5	16.6	42.4	8.2	9.4	0.0
Cycle Q Clear(g_c), s	14.5	16.6	42.4	8.2	9.4	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	360	583	1008	1258	233	
V/C Ratio(X)	0.74	0.83	0.95	0.31	0.76	
Avail Cap(c_a), veh/h	413	669	1229	1621	362	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.9	36.7	16.0	6.2	40.9	0.0
Incr Delay (d2), s/veh	6.2	7.8	13.1	0.1	5.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	6.0	17.4	2.5	4.3	0.0
Unsig. Movement Delay, s/veh						0.00
LnGrp Delay(d),s/veh	42.1	44.5	29.1	6.3	45.9	0.0
LnGrp LOS	D	D	C	A	D	A
Approach Vol, veh/h	752			1340	320	A
Approach Delay, s/veh	43.6			22.5	25.4	
Approach LOS	D			C	C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	53.9	17.9		25.9		71.8
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s	60.0	19.0		23.0		85.0
Max Q Clear Time (g_c+I1), s	44.4	11.4		18.6		10.2
Green Ext Time (p_c), s	3.5	0.4		1.3		2.3

Intersection Summary			
HCM 6th Ctrl Delay		29.5	
HCM 6th LOS		C	

Notes

Unsignalized Delay for [SBR] is included in calculations of the approach delay and intersection delay.

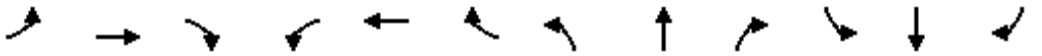
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	616	171	19	1045	10	377	47	27	38	44	339
Future Volume (veh/h)	158	616	171	19	1045	10	377	47	27	38	44	339
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1781	1900	1826	1841	1307	1885	1796	1781	1856	1870	1870
Adj Flow Rate, veh/h	172	670	0	21	1136	11	410	51	29	41	48	368
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	8	0	5	4	40	1	7	8	3	2	2
Cap, veh/h	319	1887		364	1679	16	566	292	245	312	330	493
Arrive On Green	0.10	0.39	0.00	0.03	0.33	0.33	0.16	0.16	0.16	0.18	0.18	0.18
Sat Flow, veh/h	1753	4863	1610	1739	5132	50	3483	1796	1510	1767	1870	2790
Grp Volume(v), veh/h	172	670	0	21	741	406	410	51	29	41	48	368
Grp Sat Flow(s),veh/h/ln	1753	1621	1610	1739	1675	1832	1742	1796	1510	1767	1870	1395
Q Serve(g_s), s	5.1	8.2	0.0	0.7	16.1	16.1	9.4	2.1	1.4	1.6	1.8	10.5
Cycle Q Clear(g_c), s	5.1	8.2	0.0	0.7	16.1	16.1	9.4	2.1	1.4	1.6	1.8	10.5
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	319	1887		364	1096	599	566	292	245	312	330	493
V/C Ratio(X)	0.54	0.36		0.06	0.68	0.68	0.72	0.17	0.12	0.13	0.15	0.75
Avail Cap(c_a), veh/h	381	2894		427	1794	981	870	449	377	484	512	764
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.3	18.2	0.0	17.4	24.4	24.4	33.4	30.3	30.0	29.2	29.2	32.8
Incr Delay (d2), s/veh	1.4	0.1	0.0	0.1	0.7	1.3	1.8	0.3	0.2	0.2	0.2	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	2.9	0.0	0.3	6.1	6.8	4.0	0.9	0.5	0.7	0.8	3.6
Unsig. Movement Delay, s/veh			0.00									
LnGrp Delay(d),s/veh	18.7	18.4	0.0	17.4	25.2	25.8	35.2	30.6	30.3	29.4	29.4	35.1
LnGrp LOS	B	B	A	B	C	C	D	C	C	C	C	D
Approach Vol, veh/h		1028	A		1168			490			457	
Approach Delay, s/veh		15.1			25.2			34.4			34.0	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.0	32.5		19.8	7.9	37.6		18.7
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	10.0	44.0		22.0	5.0	49.0		20.0
Max Q Clear Time (g_c+I1), s	7.1	18.1		12.5	2.7	10.2		11.4
Green Ext Time (p_c), s	0.1	8.4		1.3	0.0	5.2		1.3

Intersection Summary	
HCM 6th Ctrl Delay	24.6
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR] is included in calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	0	57	0	2	2	68	619	1	1	738	171
Future Volume (veh/h)	112	0	57	0	2	2	68	619	1	1	738	171
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1900	1811	1900	1900	1900	1900	1826	418	418	1841	1870
Adj Flow Rate, veh/h	118	0	60	0	2	2	72	652	1	1	777	180
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	6	0	0	0	0	5	100	100	4	2
Cap, veh/h	295	7	87	0	151	151	135	824	216	79	1120	965
Arrive On Green	0.17	0.00	0.17	0.00	0.17	0.17	0.61	0.61	0.61	0.61	0.61	0.61
Sat Flow, veh/h	953	42	506	0	872	872	79	1353	354	0	1840	1585
Grp Volume(v), veh/h	178	0	0	0	0	4	724	0	1	778	0	180
Grp Sat Flow(s),veh/h/ln	1500	0	0	0	0	1743	1432	0	354	1840	0	1585
Q Serve(g_s), s	4.8	0.0	0.0	0.0	0.0	0.1	6.0	0.0	0.1	0.0	0.0	2.3
Cycle Q Clear(g_c), s	5.1	0.0	0.0	0.0	0.0	0.1	19.1	0.0	0.1	13.1	0.0	2.3
Prop In Lane	0.66		0.34	0.00		0.50	0.10		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	390	0	0	0	0	301	958	0	216	1199	0	965
V/C Ratio(X)	0.46	0.00	0.00	0.00	0.00	0.01	0.76	0.00	0.00	0.65	0.00	0.19
Avail Cap(c_a), veh/h	751	0	0	0	0	723	2044	0	472	2529	0	2112
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.7	0.0	0.0	0.0	0.0	15.7	6.5	0.0	3.5	6.1	0.0	4.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.6	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	1.5	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.6	0.0	0.0	0.0	0.0	15.7	7.8	0.0	3.5	6.7	0.0	4.0
LnGrp LOS	B	A	A	A	A	B	A	A	A	A	A	A
Approach Vol, veh/h		178			4			725			958	
Approach Delay, s/veh		18.6			15.7			7.7			6.2	
Approach LOS		B			B			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		32.9		12.9		32.9		12.9				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		60.0		18.0		60.0		18.0				
Max Q Clear Time (g_c+I1), s		21.1		7.1		15.1		2.1				
Green Ext Time (p_c), s		5.7		0.6		6.2		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			8.0									
HCM 6th LOS			A									

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	285	783	578	273	354	173
Future Volume (veh/h)	285	783	578	273	354	173
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1767	1885	1856	1841	1870	1589
Adj Flow Rate, veh/h	294	807	596	281	365	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	9	1	3	4	2	21
Cap, veh/h	548	916	645	1064	422	
Arrive On Green	0.33	0.33	0.30	0.58	0.23	0.00
Sat Flow, veh/h	1682	2812	1767	1841	1870	1346
Grp Volume(v), veh/h	294	807	596	281	365	0
Grp Sat Flow(s),veh/h/ln	1682	1406	1767	1841	1870	1346
Q Serve(g_s), s	14.9	28.2	27.3	7.9	19.6	0.0
Cycle Q Clear(g_c), s	14.9	28.2	27.3	7.9	19.6	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	548	916	645	1064	422	
V/C Ratio(X)	0.54	0.88	0.92	0.26	0.87	
Avail Cap(c_a), veh/h	614	1026	769	1273	503	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	28.7	33.2	23.7	10.9	38.8	0.0
Incr Delay (d2), s/veh	0.8	8.3	15.1	0.1	12.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	10.3	12.9	2.9	10.1	0.0
Unsig. Movement Delay, s/veh						0.00
LnGrp Delay(d),s/veh	29.5	41.5	38.8	11.1	51.7	0.0
LnGrp LOS	C	D	D	B	D	A
Approach Vol, veh/h	1101			877	543	A
Approach Delay, s/veh	38.3			29.9	34.8	
Approach LOS	D			C	C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	36.7	28.5		38.9		65.2
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s	30.0	27.0		37.0		71.0
Max Q Clear Time (g_c+I1), s	29.3	21.6		30.2		9.9
Green Ext Time (p_c), s	1.4	0.9		2.7		1.6

Intersection Summary	
HCM 6th Ctrl Delay	34.6
HCM 6th LOS	C

Notes

Unsignalized Delay for [SBR] is included in calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	241	1021	495	779	621	46	396	146	101	111	140	272
Future Volume (veh/h)	241	1021	495	779	621	46	396	146	101	111	140	272
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1900	1900	1767	1633	1885	1885	1841	1900	1900	1752
Adj Flow Rate, veh/h	277	1174	0	895	714	53	455	168	116	128	161	313
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	3	0	0	9	18	1	1	4	0	0	10
Cap, veh/h	436	1098		794	2275	168	464	251	208	221	232	319
Arrive On Green	0.14	0.22	0.00	0.42	0.50	0.50	0.13	0.13	0.13	0.12	0.12	0.12
Sat Flow, veh/h	1781	5066	1610	1810	4583	338	3483	1885	1560	1810	1900	2613
Grp Volume(v), veh/h	277	1174	0	895	500	267	455	168	116	128	161	313
Grp Sat Flow(s),veh/h/ln	1781	1689	1610	1810	1608	1706	1742	1885	1560	1810	1900	1306
Q Serve(g_s), s	21.4	39.0	0.0	75.0	16.7	16.8	23.4	15.3	12.5	12.0	14.6	21.5
Cycle Q Clear(g_c), s	21.4	39.0	0.0	75.0	16.7	16.8	23.4	15.3	12.5	12.0	14.6	21.5
Prop In Lane	1.00		1.00	1.00		0.20	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	436	1098		794	1596	847	464	251	208	221	232	319
V/C Ratio(X)	0.64	1.07		1.13	0.31	0.32	0.98	0.67	0.56	0.58	0.69	0.98
Avail Cap(c_a), veh/h	459	1098		794	1596	847	464	251	208	221	232	319
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.5	70.5	0.0	47.4	27.0	27.1	77.8	74.2	73.0	74.6	75.8	78.8
Incr Delay (d2), s/veh	2.7	47.8	0.0	73.0	0.1	0.2	36.4	6.6	3.3	3.7	8.6	44.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	21.7	0.0	49.8	6.6	7.0	12.9	7.9	5.2	5.8	7.7	9.2
Unsig. Movement Delay, s/veh			0.00									
LnGrp Delay(d),s/veh	47.2	118.3	0.0	120.4	27.1	27.3	114.1	80.8	76.3	78.3	84.3	123.6
LnGrp LOS	D	F	A	F	C	C	F	F	E	E	F	F
Approach Vol, veh/h		2020	A		1662			739			602	
Approach Delay, s/veh		75.3			77.4			100.6			103.5	
Approach LOS		E			E			F			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	39.6	94.4		27.0	80.0	44.0		29.0
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	26.0	86.0		21.0	74.0	38.0		23.0
Max Q Clear Time (g_c+I1), s	23.4	18.8		23.5	77.0	41.0		25.4
Green Ext Time (p_c), s	0.2	5.8		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	83.1
HCM 6th LOS	F

Notes

Unsignalized Delay for [EBR] is included in calculations of the approach delay and intersection delay.

APPENDIX J

GRTA LETTER OF UNDERSTANDING (LOU)

LETTER OF UNDERSTANDING

February 9, 2022

Blake Roell
Sansone Group
120 Central Avenue
Suite 500St. Louis, MO 63105
314-727-6664

RE: Sansone Speculative Industrial Development – DRI # 3506

Dear Mr. Roell:

The purpose of this Letter of Understanding is to document the discussions during the Methodology Meeting held virtually on January 31, 2022 regarding Sansone Speculative Industrial Development of Regional Impact (DRI). The *GRTA DRI Review Procedures*, as well as the inputs and parameters documented in this Letter of Understanding and the revised Methodology Meeting Packet, shall be adhered to in preparing the GRTA required Transportation Study.

PROJECT OVERVIEW

- The proposed site is located along State Route 42/US Highway 23 (SR 42) at Pine Grove Road, in Henry County, Georgia.
- The proposed development includes 882,200 square feet (sf) of industrial space on a 113.16-acre plot. Building coverage for the industrial development will utilize 20.37 acres, with 44.13 acres being utilized as open space and another 44.13 acres estimated to be impervious. The remaining 4.53 acres of the development includes floodplain and stream buffers from the site
- The projected build-out is one phase to be completed by 2023.
- The proposed development includes one (1) full access driveway at SR 42 and Pine Grove Road.
- The DRI trigger for this development is rezoning from Residential Agriculture (RA) to Light Industrial (M-1).
- The vehicular trip generation is estimated to be 1,432 net daily trips based on the *ITE Trip Generation Manual 11th edition.*
- The applicant is applying for approval under GRTA's expedited Traffic Impact Study review process.

STUDY NETWORK

1. SR 42 at Bethlehem Road
2. SR 42 at Pine Grove Road / Site Driveway
3. SR 42 at Market Place Boulevard
4. SR 42 at Bill Gardner Parkway
5. Bill Gardner Parkway at Market Place Boulevard

METHODOLOGY MEETING PACKET INPUTS & PARAMETERS

- The Site Plan shall meet all the applicable requirements in Section 7.1 of the *GRTA DRI Review Procedures*.
- All Study Network intersections shall be analyzed during the AM and PM peak hours for (1) existing conditions, (2) future "no-build" conditions, and (3) future "build" conditions as specified in the *GRTA DRI Review Procedures*.
- This DRI shall be modeled and reviewed in one phase to be completed by 2023.
- The Level of Service (LOS) standard for all analysis shall be LOS D unless specified otherwise in Section 3.2.2.1. For example, a LOS E standard is allowed if the existing LOS for the intersection or approach is a LOS F.
- Default values should not be assumed in the traffic modeling. Existing conditions shall be taken into account as required in Section 3.2.2.
- The trip generation calculations in the revised Methodology Meeting Packet shall be used in the Transportation Study. Mixed-use and pass-by reductions are not allowed for this site.
- The trip assignment approach in the revised Methodology Meeting Packet shall be utilized for all Study Network intersection movements.
- The applicant shall research TIP, STIP, RTP and GDOT's construction work program, as well as any local government and transit operator plans (SPLOST, CIP, etc.), to determine the open date, sponsor, cost of the project, funding source(s), for future roadway projects in the project vicinity. Programmed transportation projects anticipated to open on or before the Build Out year of the DRI Project shall be modeled as completed in the No-Build and Build conditions unless approved otherwise.
- A 2.2% annual traffic Background Growth Rate shall be used for all roadways.
- Capacity analysis shall be based on turning movement counts collected not more than 12-months prior to the date of the actual DRI submittal to GRTA, unless specified otherwise. As specified in Section 2.3, turning movement counts shall be collected while local schools are in session, on a Tuesday, Wednesday or Thursday (unless approved otherwise) and not during holiday periods (weeks of July 4th, Thanksgiving and +/- 5 days of Christmas).
- If the *GRTA DRI Review Procedures* requires an Enhanced Focus Area for Heavy Vehicles or an Enhanced Focus Area for Dense Urban Environments, the Transportation Study shall incorporate the inputs and parameters agreed to at the Methodology Meeting and documented in the revised Methodology Meeting Packet. These inputs may include a Heavy Vehicle modeling percentages, a Heavy Vehicle route map, a pedestrian crosswalk delay adjustment and a bus blockage adjustment factor.

ADDITIONAL REQUIREMENTS

All applicable requirements of the *GRTA DRI Review Procedures* must be met for the Transportation Study to be considered complete. The *GRTA DRI Review Procedures* are located on GRTA's DRI website: https://www.srta.ga.gov/programs-projects/dev-of-regional-impact/ Contact GRTA staff if you have any questions on these requirements.

The Transportation Study shall also include as attachments the native LOS modeling file (i.e., Synchro modeling files) as well as the modeling reports (PDFs) for all Study Network intersections for the Existing, No-Build and Build conditions for all phases. The PDF reports shall be numbered (in page headers) and organized in order according to the Study Network numbering sequence in this Letter of Understanding. The reports shall also be organized in the following sequence: *Existing condition AM, Existing condition PM, No-build condition AM, No-Build condition PM, Build condition AM, Build condition PM*. If improvements are modeled, those PDFs shall be labeled as such and follow the appropriate condition's applicable peak period.

The Transportation Study appendices shall also include all turning movement count data, regardless of if using historic data or newly collected turning movement counts.

When documenting any Queue Length impacts required in Section 3.2.3.6, the TIS Executive Summary shall also note any individual *movements* not meeting the LOS standard where the DRI Project adds trips in the Build condition and exceeds available storage capacity for that movement.

When identifying mitigations in the existing, no-build and build conditions, the mitigations identified in preceding conditions shall not be modeled as complete when conducting the LOS analysis. The same mitigation may still be proposed as mitigation in the subsequent condition but it shall not be included as completed in the default analysis. For example, a turn lane may be identified as a needed improvement in the no-build condition. The turn lane should not be modeled as completed in the build condition. The turn lane should only be modeled as complete in the no-build with improvements condition and the build with improvements condition.

DRI REVIEW PACKAGE SUBMITTAL

GRTA will begin reviewing the DRI once the DRI Review Package is submitted and deemed complete. The DRI Review Package includes: the permitting Local Government inputting both Department of Community Affairs (DCA) forms into the DCA DRI website; and the **Traffic Engineer submittal of the GRTA Transportation Study (including LOS appendices, traffic count data and any other required attachments) and Site Plan to GRTA staff and ALL stakeholders included in the CC list of this Letter of Understanding**.

All DRI Review Packages shall be submitted electronically via email to all stakeholders in the CC list of the Letter of Understanding. If the DRI Review Package total file size is greater than 10 MB, the DRI Review Package shall be submitted via email with an FTP link provided for downloading the files.

Please contact me if you have any questions about the Letter of Understanding or the *GRTA DRI Review Procedures*.

Sincerely,

Elizabeth Davis
Transit and Transportation Planner

Cc:

Andrew Smith, ARC
Aries Little, ARC
Donald Shockey, ARC
Bert Foster, City of Locust Grove
Daunte Gibbs, City of Locust Grove
Tim Young, City of Locust Grove
Ahmed, Kathe, GDOT
Daniel J Trevorrow, GDOT
Donald Wilkerson, GDOT
Aileen Daney, GRTA/ATL
December Weir, GRTA/ATL
David Simmons, Henry County
William Greer, Eberly & Associates, Inc.
David Flanders, HNTB Architecture
George Doyle, Nv5 Engineering
Jonathan Cate, Nv5 Engineering
Greg Small, Sansone Group
John Brown, Sansone Group